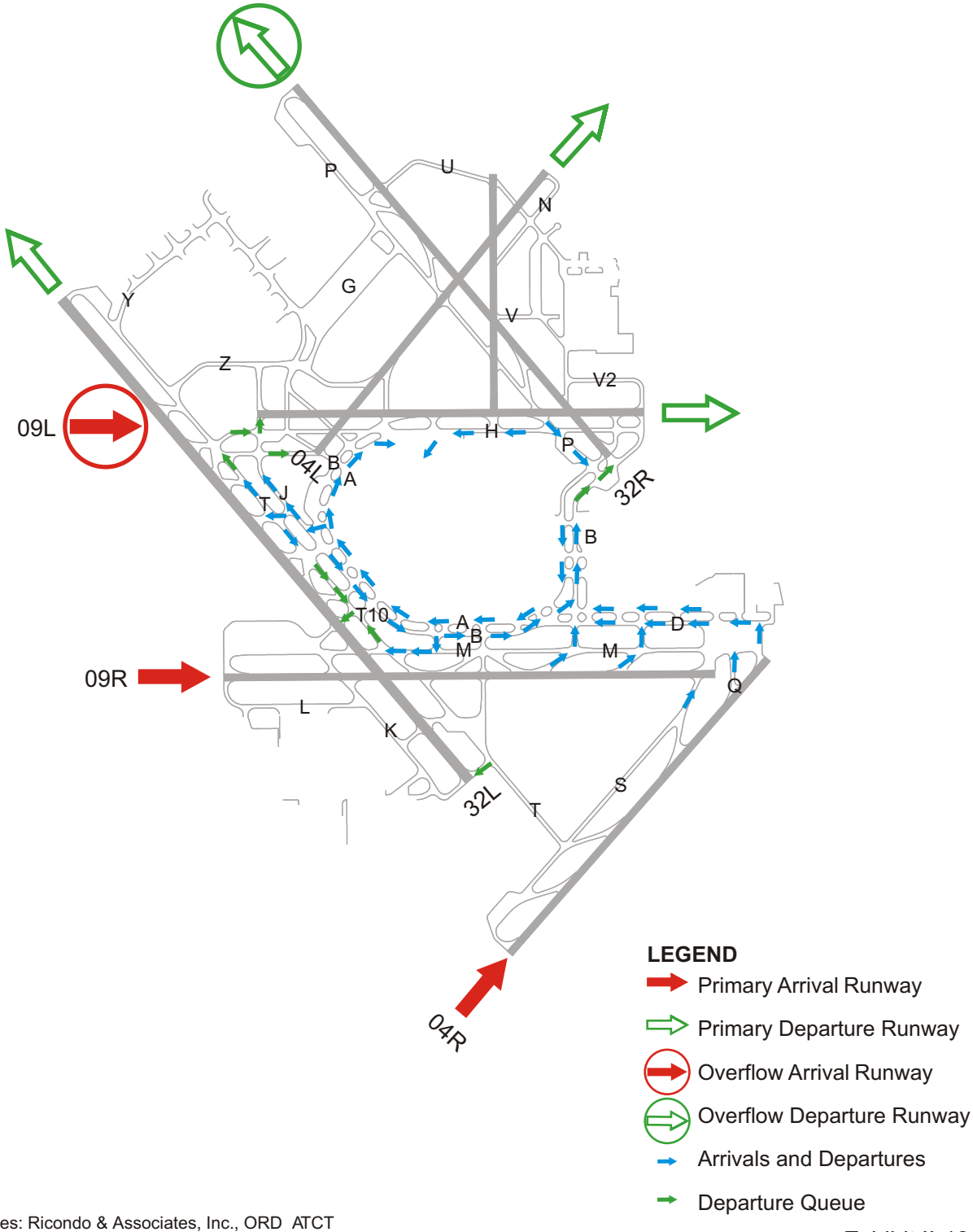
arrival and departure flight paths associated with this configuration. The O'Hare ATCT will generally select this operating configuration under VMC with winds ranging from the northwest (330 degrees) to southeast (130 degrees). Historic data collected from the Airport Noise Monitoring System (ANMS) over a period from January 2000 through September 2001 show this configuration is used for approximately 40 percent of annual operations.

The base configuration of Plan X consists of aircraft arriving on Runways 4R and 9R and aircraft departing on Runways 32L (typically from the intersection of Taxiway T10), 4L, and 9L. During periods of peak arrival demand, Runway 9L is used as the third arrival runway.

The following paragraphs discuss arrival, departure, and airfield circulation associated with Plan X.

- *Arrivals:* Aircraft entering the TRACON airspace from STORY and KRENA arrival gates and in the tower en-route structure from MKE and SBN are typically assigned Runway 9R. Aircraft arriving through the BEARZ and PLANO arrival gates are typically assigned Runway 4R. Arriving aircraft assigned Runway 9L are generally spaced at an interval of six nautical miles to accommodate aircraft departing on Runways 4L, 32L, and 9L. During periods of peak arrival demand, a number of off-load strategies are employed to balance traffic on a given route or runway. These strategies are shown as secondary arrival routes on Exhibit II-12. Traffic from STORY and SBN may be vectored to a left downwind to Runway 9L, if in use. Arriving traffic using the BEARZ arrival gate is normally assigned to Runway 4R. Traffic from BEARZ may also be vectored to a right downwind to Runway 9R or a left downwind to Runway 9L. PLANO traffic may be vectored for a right base entry to Runway 9R. KRENA and MKE traffic may be vectored to a left base entry to Runway 9L.
- *Departures:* Aircraft depart the TRACON airspace as illustrated on Exhibit II-12. Departure runways are generally assigned to be consistent with the intended route of flight. On Plan X, aircraft departing to North American destinations and Asia via BAE or PETTY are normally assigned Runway 32L. European departures using BAE or PETTY as initial departure fixes will typically use Runway 32R. Domestic traffic departing to the east over ELX or GIJ are typically assigned to Runway 4L. International traffic departing via eastbound fixes use Runway 32R. Runway 9L serves traffic departing to the south over EON, GUIDO, or RBS. Westbound traffic departing via PLL or MZV uses Runway 32L. As with the arrivals, there are a number of off-load strategies that are used to balance the number of departures at the runways. These are shown as secondary departure routes on Exhibit II-12. During periods of peak eastbound traffic, aircraft routed over ELX are assigned Runway 32L rather than Runway 4L. In addition, aircraft routed over GIJ may depart from Runway 9L in lieu of Runway 4L. Conversely, during high west departure demand, north departures and possibly some low performance westbound aircraft are assigned to Runway 4L.
- *Airfield Circulation:* The primary ground movements associated with this configuration are illustrated on **Exhibit II-13.** For reference purposes, the primary and secondary arrival and departure runways are also shown. As shown, taxiing aircraft are not separated by arrivals and departures but are separated by directional flow on parallel taxiways. Traffic on Taxiway A moves in a clockwise direction, while traffic on Taxiway B moves in a counterclockwise direction. Inbound taxi routings are also depicted on Exhibit II-13. It is important to note that some aircraft destined to Concourses E (east side), F, G, H, or K may be assigned Taxiways H and B should there be opposite direction traffic on the Taxiway B



Sources: Ricondo & Associates, Inc., ORD ATCT
Prepared by: Ricondo & Associates, Inc.

Exhibit II-13

0 N.T.S.

North

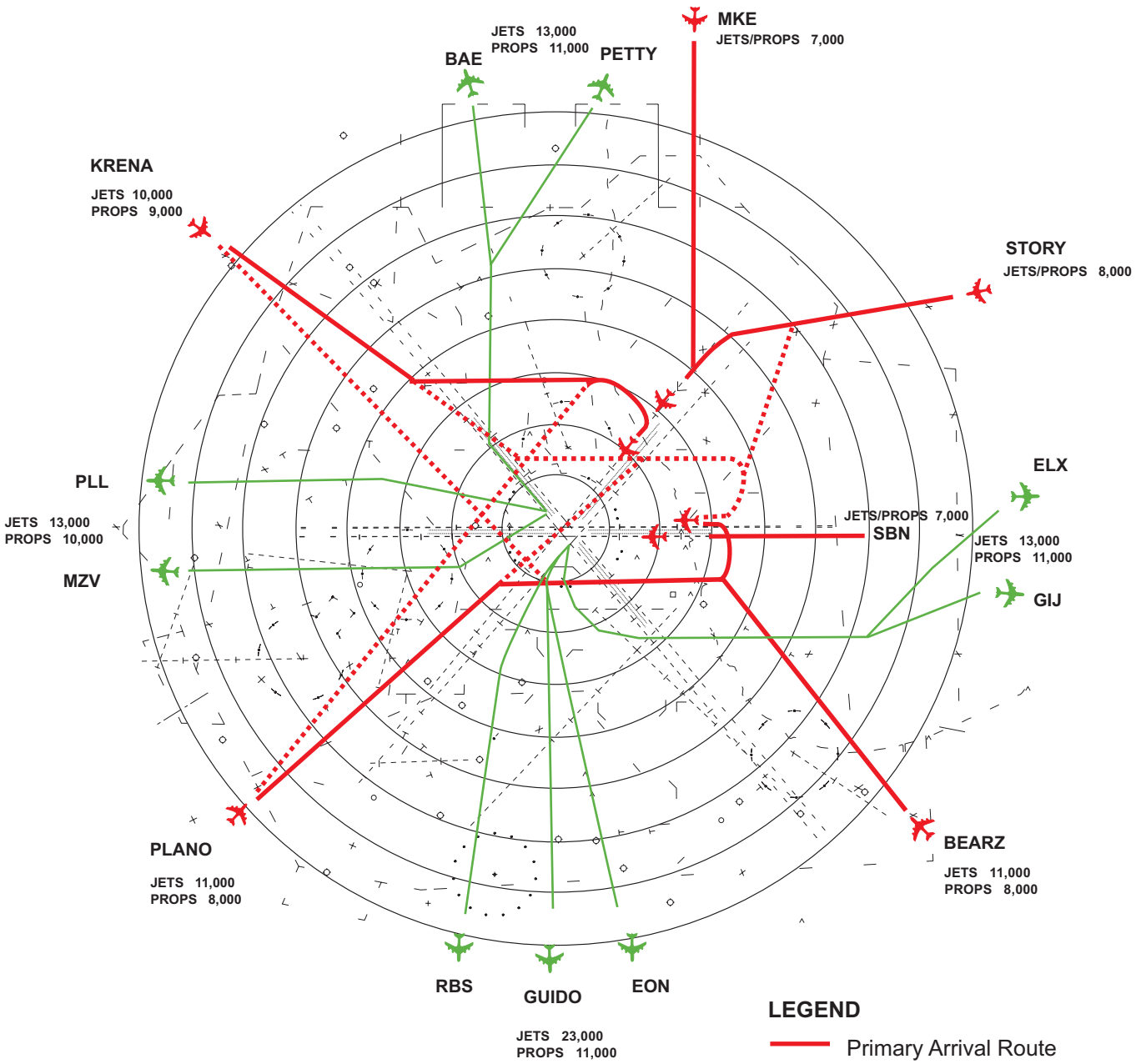
Plan X
Taxiway Routes

Bridge (Bravo Bridge). This allows traffic to expeditiously clear Runway 9L after landing. In addition, most aircraft departing on Runway 32L will depart from the Taxiway T10 intersection.

2.3.2.2 Plan W

Plan W is another higher capacity operating configuration at the Airport during VMC. **Exhibit II-14** illustrates the primary arrival and departure flight paths associated with this operating configuration. This configuration is generally used during VMC with winds ranging from the southwest (230 degrees) to northwest (310 degrees). No tail wind component can exist for Runway 22R operations, as LAHSO procedures are used. Historic data collected from the ANMS from January 2000 through September 2001 show this configuration is used for approximately 33 percent of annual operations.

- *Arrivals:* Aircraft entering the TRACON airspace from STORY and KRENA arrival gates and in the tower en-route structure from MKE is normally assigned Runway 22R. Aircraft arriving through the BEARZ and PLANO arrival gates and in the tower en-route structure from SBN is normally assigned Runway 27L. The primary operating configuration of Plan W consists of arrivals on Runways 22R and 27L and simultaneous departures on Runways 32L (from the intersection of Taxiway T10) and 22L. During periods of peak arrival demand, Runway 27R is used as a third arrival runway. LAHSO procedures are required for this operation, as Runways 22R and 27R intersect, with 6,050 feet of runway available to the Runway 22R LAHSO hold point. Aircraft types such as the B-737 or smaller are capable of conducting this operation. However, some aircraft operators require a minimum of 8,000 feet for the use of LAHSO procedures. This precludes many pilots from using Runway 22R and requires the TRACON to segregate traffic not only by aircraft type but also by company. Off-load strategies are used during periods of peak arrival demand. Traffic from STORY may be vectored to a right base leg entry to Runways 27R or 27L. Aircraft from KRENA may be vectored to a right downwind to Runways 27R or 27L. PLANO traffic may be vectored to a right downwind to Runways 27R or 22R.
- *Departures:* Aircraft depart the TRACON airspace as indicated on Exhibit II-14. In this configuration, eastbound (ELX or GIJ) and southbound (EON, RBS, or GUIDO) departures are generally assigned Runway 22L. Northbound (BAE or PETTY) and westbound departures utilizing the PLL or MZV track are assigned Runway 32L. Runway 32R is also used during some periods to accommodate international departures routed over west and north departure fixes. Departure runway balancing strategies are associated with this operating configuration. During periods of heavy eastbound traffic, aircraft routed over southern fixes are assigned to Runway 32L rather than Runway 22L. During periods of high west departure demand, aircraft departing via MZV/IOW track are assigned Runway 22L.
- *Airfield Circulation:* The primary ground movements associated with this configuration are illustrated on **Exhibit II-15**. Traffic on Taxiway A moves in a clockwise direction, while traffic on Taxiway B moves in a counterclockwise direction. Most aircraft departing from Runway 32L queue on Taxiway T north of Taxiway T10 and depart from the Taxiway T10 intersection. Aircraft landing on Runway 22R are required to land and hold short of Runway 27R.



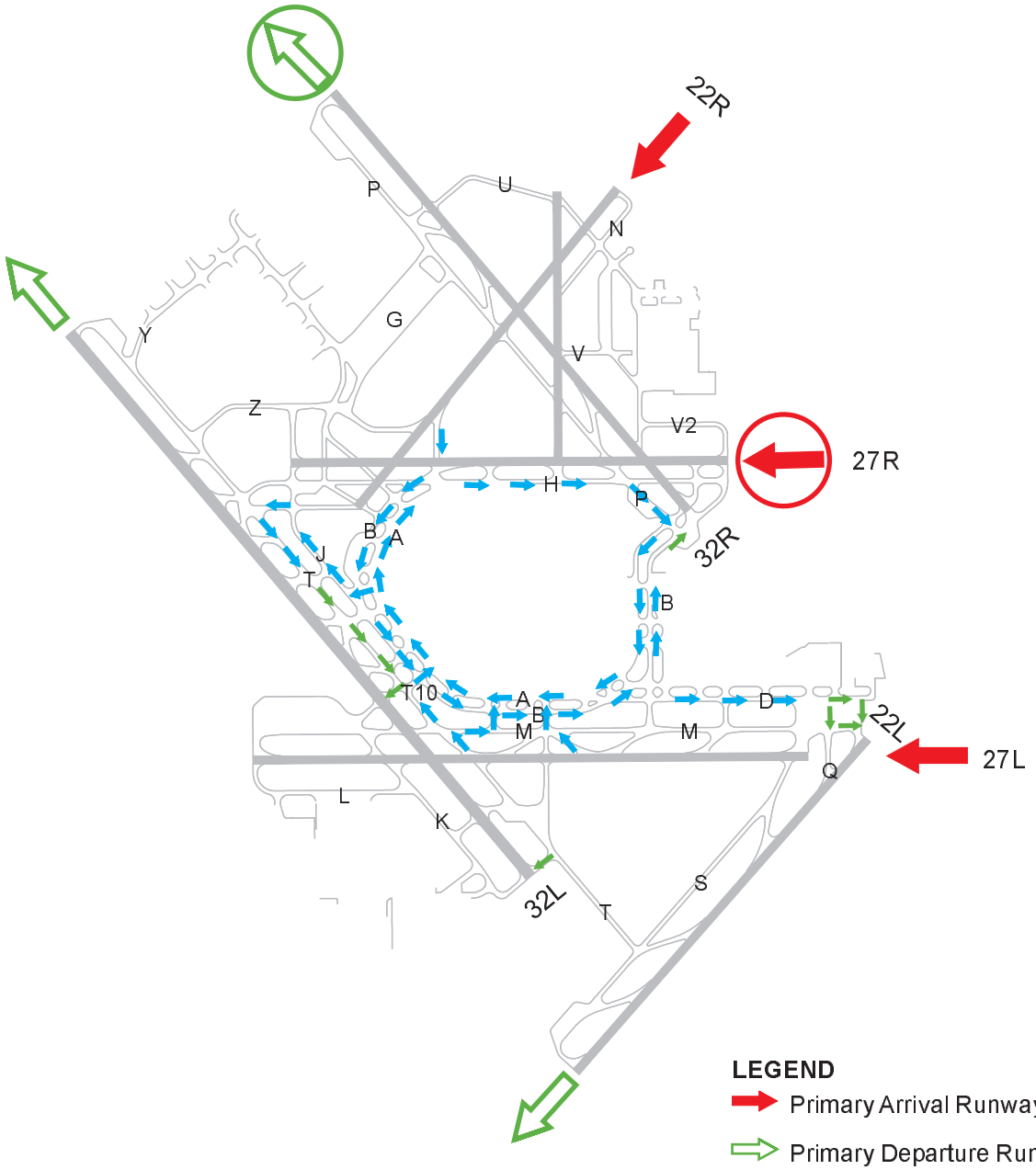
Sources: Ricondo & Associates, Inc., C90 TRACON
Prepared by: Ricondo & Associates, Inc.

Exhibit II-14

0 N.T.S.

north

Plan W
Airspace Routes



LEGEND

- Primary Arrival Runway
- Primary Departure Runway
- Overflow Arrival Runway
- Overflow Departure Runway
- Arrivals and Departures
- Departure Queue

Sources: Ricondo & Associates, Inc., ORD ATCT
Prepared by: Ricondo & Associates, Inc.

Exhibit II-15

0 N.T.S.

north

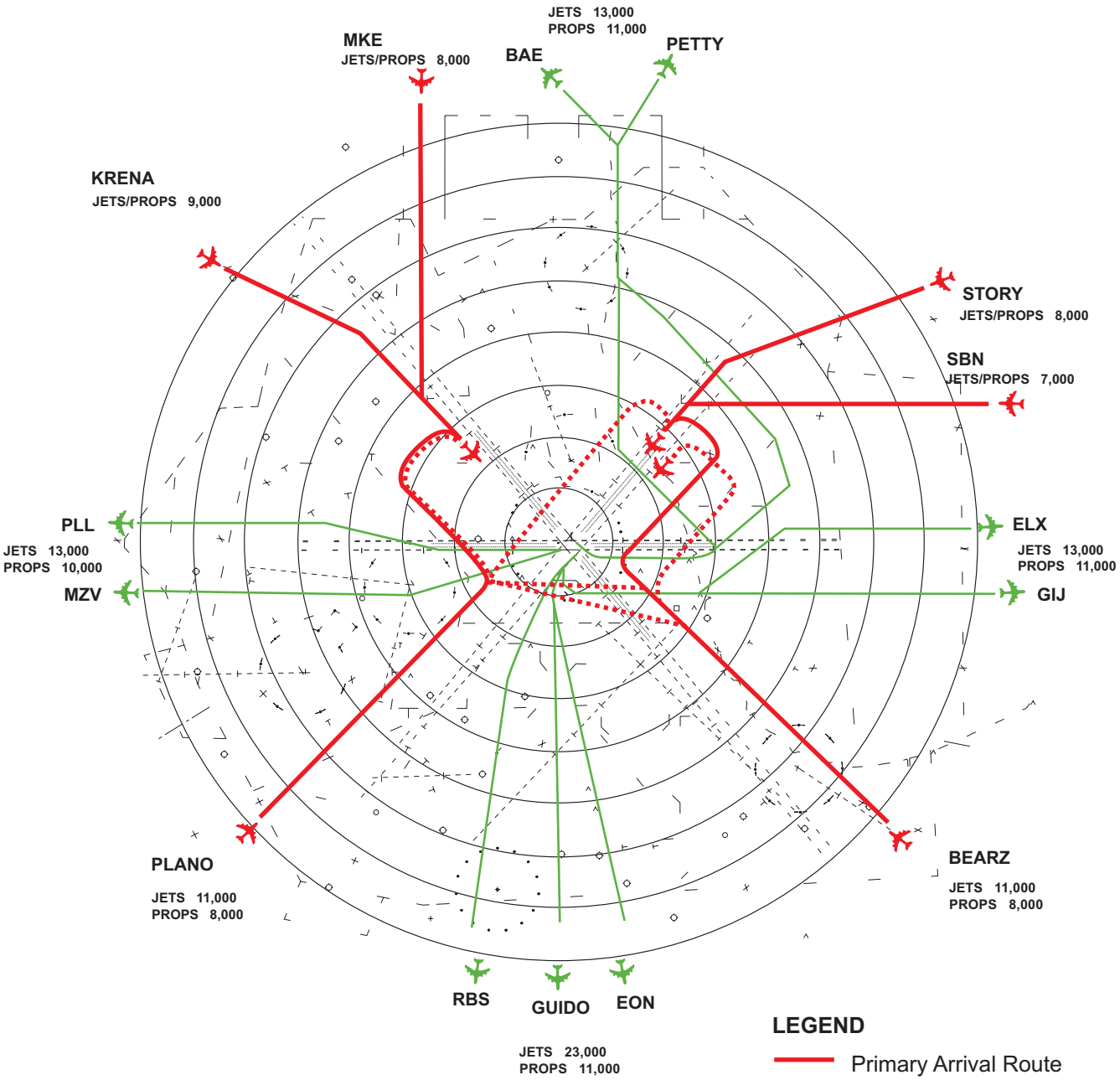
Plan W
Taxiway Routes

2.3.2.3 Plan B

At one time, Plan B was the most frequently used operating configuration at the Airport. Because LAHSO procedures between aircraft arriving Runway 14R and departing Runway 27L can not be used due to a change in LAHSO requirements, this configuration is no longer preferred. Plan B is generally used during VMC with winds ranging from the southeast (130 degrees) to south (180 degrees), and from southeast to southwest (220 degrees) under wet conditions that would preclude LAHSO and the use of Plan W. ANMS data collected from January 2000 through September 2001 demonstrate this configuration is used for about 16 percent of operations.

The primary operating configuration of Plan B consists of aircraft arriving on Runways 14R and 22R and overflows on Runway 22L and aircraft departing on Runways 27L, 22L, and 14L. Runway 14R arrivals are routinely spaced at intervals of 3.5 to 4.0 nautical miles to provide sufficient spacing for Runway 27L departures. **Exhibit II-16** illustrates the primary arrival and departure flight paths associated with this configuration.

- *Arrivals:* Aircraft entering the TRACON airspace from the STORY intersection, the BEARZ arrival gate, and in the tower en-route structure from SBN, are normally assigned Runway 22R. Aircraft arriving through the PLANO and KRENA arrival gates and in the tower en-route structure from MKE are normally assigned Runway 14R. During periods of peak arrival demand, Runway 22L is used as the third arrival runway, which has a significant impact on the departure capacity of the Airport. When Runway 22L is used for arrivals, Runway 14L cannot be used for departures. Further contributing to the degradation of departure capacity is the loss of Runway 22L as the only independent departure runway. To address this constraint, the use of Runway 22L for both arrivals and departures is held to a minimum and, when used, aircraft are spaced at five-nautical mile intervals to provide sufficient separation to permit a mixture of arrival and departure operations on the same runway. Off-load strategies are used during periods of peak arrival demand. Traffic from BEARZ may be vectored to a right downwind leg to Runway 14R or a left downwind to Runway 22L. Aircraft arriving from PLANO may be vectored to a right downwind to Runway 22R or a left downwind to Runway 22L.
- *Departures:* Aircraft depart the TRACON airspace as indicated on Exhibit II-16. On this configuration, eastbound (ELX or GIJ) and southbound (EON, RBS, or GUIDO) aircraft are generally assigned Runway 22L. Northbound (BAE or PETTY) traffic is assigned Runway 14L, and westbound (DBQ, IOW, or MZV) aircraft depart on Runway 27L. Runway 14L is also used during some periods to accommodate international departures routed over east and north departure fixes. Runway 14R is typically used for aircraft bound for long haul Pacific Rim destinations. Departure runway balancing strategies are associated with this operating configuration. During periods of peak eastbound traffic, aircraft routed over southern fixes are assigned Runway 27L rather than Runway 22L. Conversely, during periods of heavy west departure demand, MZV traffic can be assigned Runway 22L and ELX traffic can be accommodated by Runway 14L.
- *Airfield Circulation:* The primary ground movements associated with this configuration are illustrated on **Exhibit II-17**. Traffic on Taxiway A moves in a clockwise direction, while traffic on Taxiway B moves in a counterclockwise direction.



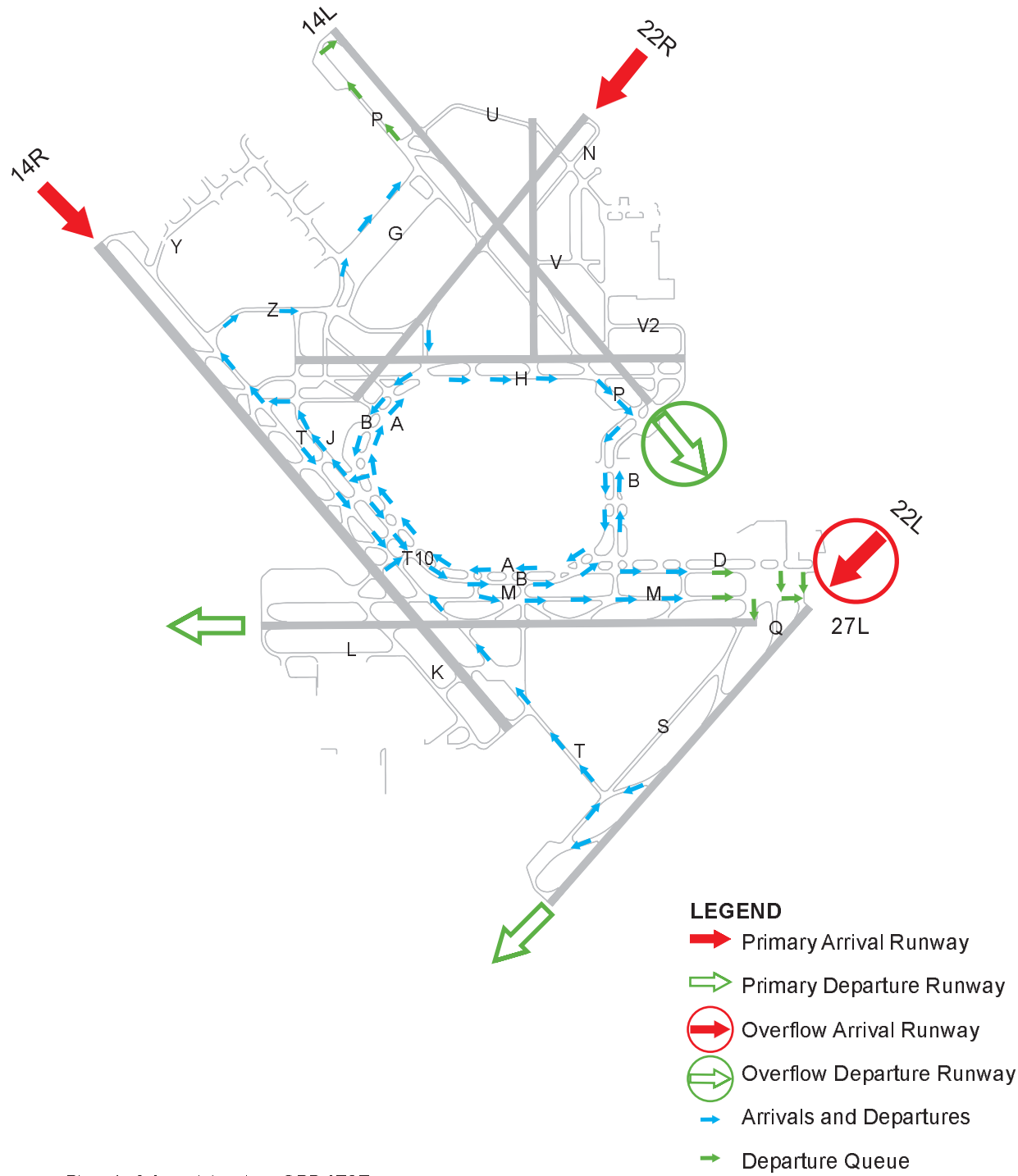
Sources: Ricondo & Associates, Inc., C90 TRACON
Prepared by: Ricondo & Associates, Inc.

Exhibit II-16

0 N.T.S.

north

Plan B
Airspace Routes



Sources: Ricondo & Associates, Inc., ORD ATCT
Prepared by: Ricondo & Associates, Inc.

Exhibit II-17

0 N.T.S.

north

Plan B
Taxiway Routes

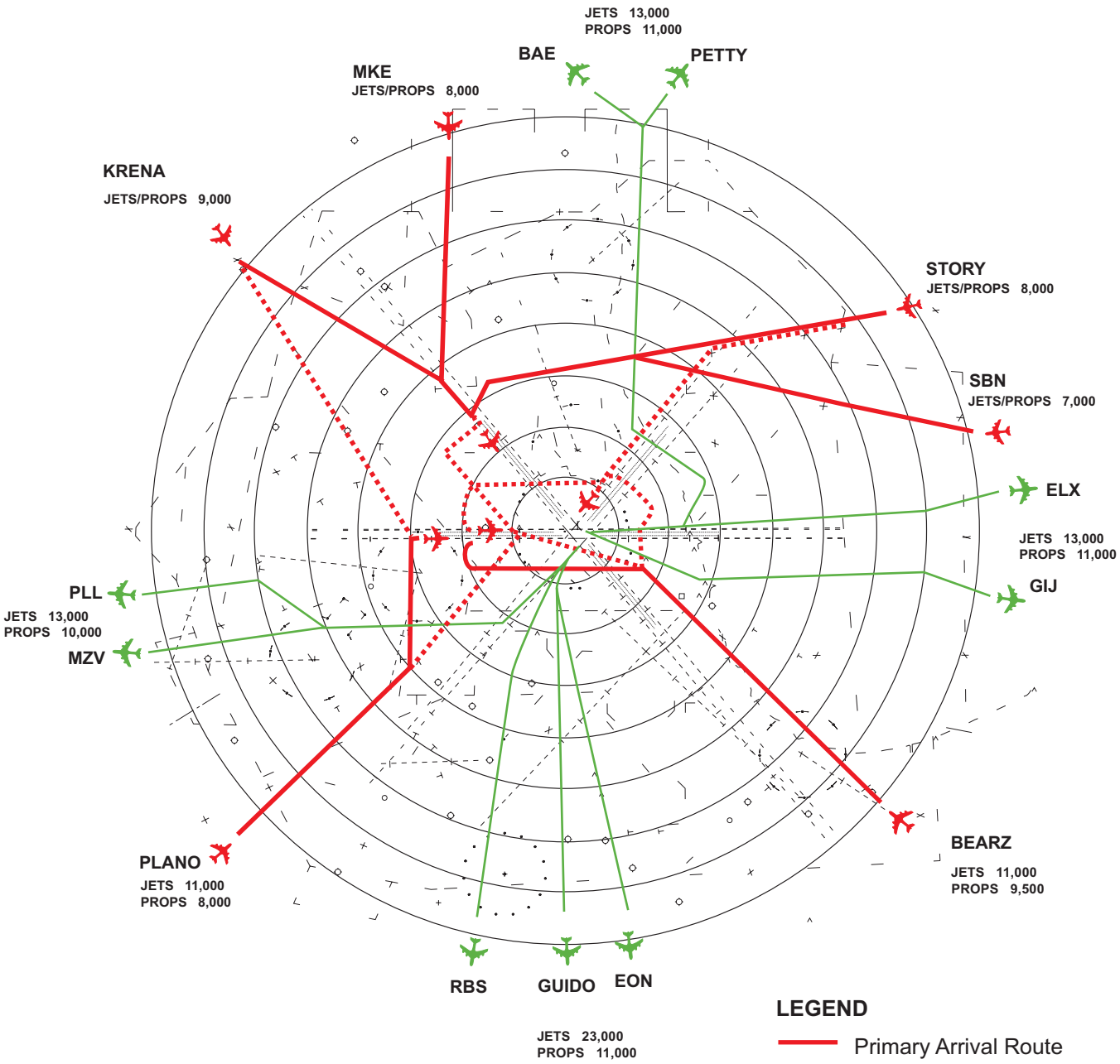
2.3.2.4 Plan B Modified

In recent years, Plan B Modified has become the third most frequently used operating configuration at the Airport. It is generally used during VMC conditions with winds ranging from the southeast (130 degrees) to south (180 degrees). No tail wind component can exist for Runway 14R while LAHSO procedures are in effect. No historic usage data was available for this configuration, as it has only recently been developed. However, it should be noted that use of this configuration appears to have decreased significantly since April/May 2003 due to further changes in LAHSO procedures.

The base configuration of Plan B Modified consists of aircraft arriving on Runways 9R and 14R, employing LAHSO procedures to hold aircraft landing on Runway 14R short of Runway 9R. On Runway 14R there is 9,800 feet of runway to the LAHSO hold point. This distance is adequate for use by all but a few aircraft types, general aviation, and foreign flag carriers. The primary departure runways include Runways 22L and 14L. During periods of peak arrival demand, Runway 22R can be used as the third arrival runway.

Exhibit II-18 illustrates the primary arrival and departure flight paths associated with this configuration.

- *Arrivals:* Aircraft entering the TRACON airspace from the STORY and KRENA arrival gates and in the tower en-route structure from MKE and SBN are normally assigned Runway 14R. Aircraft not capable of conducting a LAHSO operation on Runway 14R are assigned Runway 9R or Runway 22R, if in use. Aircraft arriving through the PLANO and BEARZ arrival gates are normally assigned Runway 9R. Off-load strategies are used during periods of peak arrival demand. Traffic from BEARZ may be vectored to a right downwind leg to Runway 14R or a left downwind to Runway 22R. Aircraft arriving from over the STORY intersection and tower en-route from SBN airspace may be vectored straight in to Runway 22R.
- *Departures:* Aircraft depart the TRACON airspace as indicated on Exhibit II-18. On this operating configuration, north (BAE or PETTY) and eastbound (ELX or GIJ) aircraft are generally assigned Runway 14L. Southbound (EON, RBS, or GUIDO) and westbound aircraft utilizing the PLL or MZV track depart on Runway 22L. Runway 14R is generally used by aircraft bound for Pacific Rim destinations. The following departure runway balancing strategies are associated with this operating configuration. During periods of peak eastbound traffic, aircraft routed over GIJ may be assigned Runway 22L rather than Runway 14L. During periods of heavy west departure demand, all or some of the southbound traffic can be assigned to Runway 14L.
- *Airfield Circulation:* The primary ground movements associated with this configuration are illustrated on **Exhibit II-19**. Traffic on Taxiway A moves in a clockwise direction, while traffic on Taxiway B moves in a counterclockwise direction. Aircraft landing on Runway 14R use LAHSO procedures and then exit the runway north of the intersection of Runways 14R and 9R.



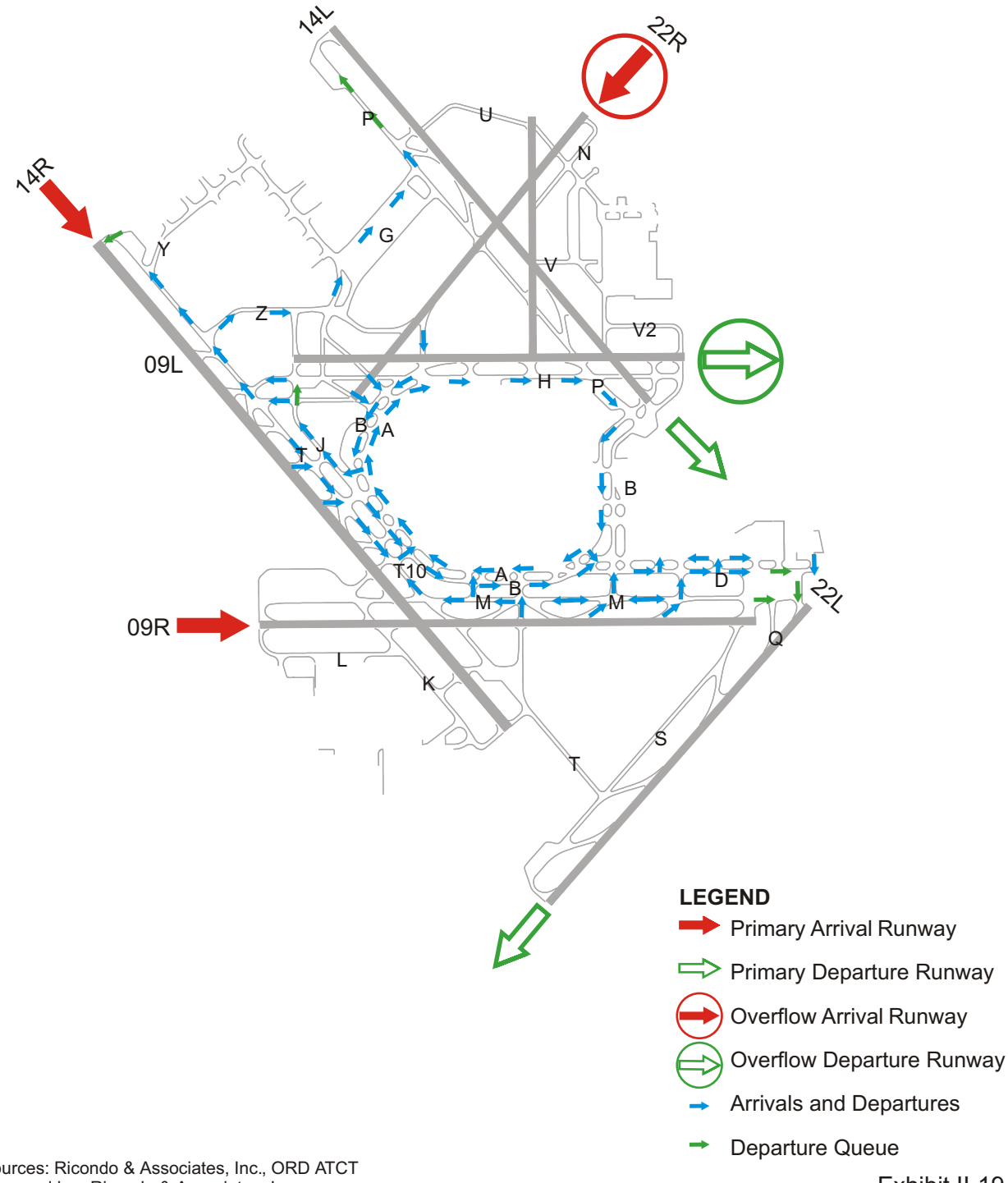
Sources: Ricondo & Associates, Inc., C90 TRACON
Prepared by: Ricondo & Associates, Inc.

Exhibit II-18

0 N.T.S.

north

Plan B Modified Airspace Routes



Sources: Ricondo & Associates, Inc., ORD ATCT
Prepared by: Ricondo & Associates, Inc.

Exhibit II-19

0 N.T.S.

north

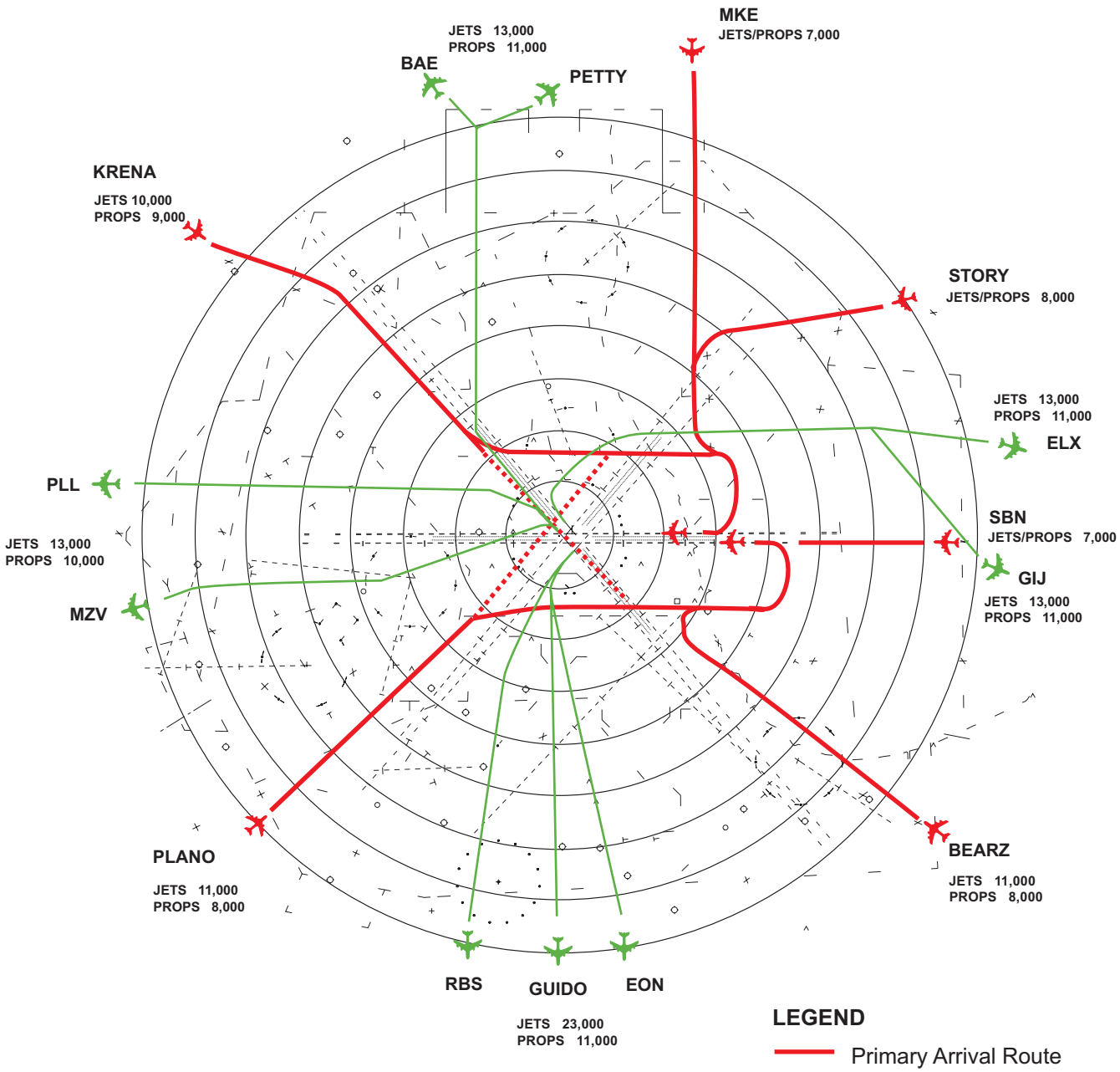
Plan B Modified Taxiway Routes

2.3.2.5 Parallel 27s

Parallel 27s is the preferred operating configuration at the Airport during Instrument Meteorological Conditions (IMC). This configuration is used in IMC conditions with a Runway Visual Range (RVR) of 1,800 feet or better. ANMS data collected from January 2000 through December 2000 demonstrate that this configuration is used for approximately five percent of annual operations.

The base operating configuration of Parallel 27s consists of aircraft arriving on Runways 27R and 27L and aircraft departing Runways 32L, 32R, and 22L. There is no third arrival runway alternative, because triple approach procedures are not authorized in IMC. **Exhibit II-20** illustrates the primary arrival and departure flight paths associated with this configuration.

- *Arrivals:* Aircraft entering the TRACON airspace from over STORY and KRENA arrival gates, and in the tower en-route structure from MKE, are normally assigned Runway 27R. Aircraft arriving through the PLANO and BEARZ arrival gates, and in the tower en-route structure from SBN, are normally assigned Runway 27L. During periods of peak arrival demand, two off-load strategies are employed to balance traffic on a given route or runway. Traffic from KRENA is vectored to a left downwind leg for Runway 27L, and at other times, traffic from PLANO is vectored to a right downwind to Runway 27R. There are generally no off-load strategies from the STORY or BEARZ arrival gates. Regardless of runway use, under Parallel 27s operations, aircraft maintain an altitude of 7,000 feet MSL or above until entering the appropriate descent area. Once in the descent area, aircraft routed to Runway 27R descend to 4,000 feet MSL, while aircraft vectored to Runway 27L descend to 5,000 feet MSL. Aircraft maintain these altitudes until established on the final approach course at least 16 nautical miles from the Airport. These procedures allow for simultaneous instrument approaches to Runways 27L and 27R.
- *Departures:* Aircraft depart the TRACON airspace as indicated on Exhibit II-20. Departing aircraft are generally assigned runways that are consistent with the intended route of flight. For this configuration, northbound (BAE or PETTY) and westbound aircraft utilizing the PLL or MZV track are generally assigned Runway 32L. Southbound (EON, RBS, or GUIDO) departures are assigned Runway 22L, while eastbound (ELX or GIJ) departures are assigned Runway 32R. The full length of Runway 32L is available for aircraft that require additional runway length. Generally, the full length of Runway 32L is used by aircraft bound for long haul Pacific Rim destinations. As with the arrivals, there are a number of off-load strategies used to balance the number of departures at the runways. During periods of heavy eastbound departure traffic, aircraft routed over GUIDO or RBS may be assigned Runway 32L, rather than Runway 22L. During periods of heavy west departure demand, departures via BAE or PETTY may be assigned Runway 32R, and/or MZV departures may be assigned Runway 22L.
- *Airfield Circulation:* The primary ground movements associated with this configuration are illustrated on **Exhibit II-21**. Traffic on Taxiway A moves in a clockwise direction, while traffic on Taxiway B moves in a counterclockwise direction. Aircraft departing on Runway 22L generally use Taxiway D. Runway 32L departures generally depart from the intersection of Taxiway T10.



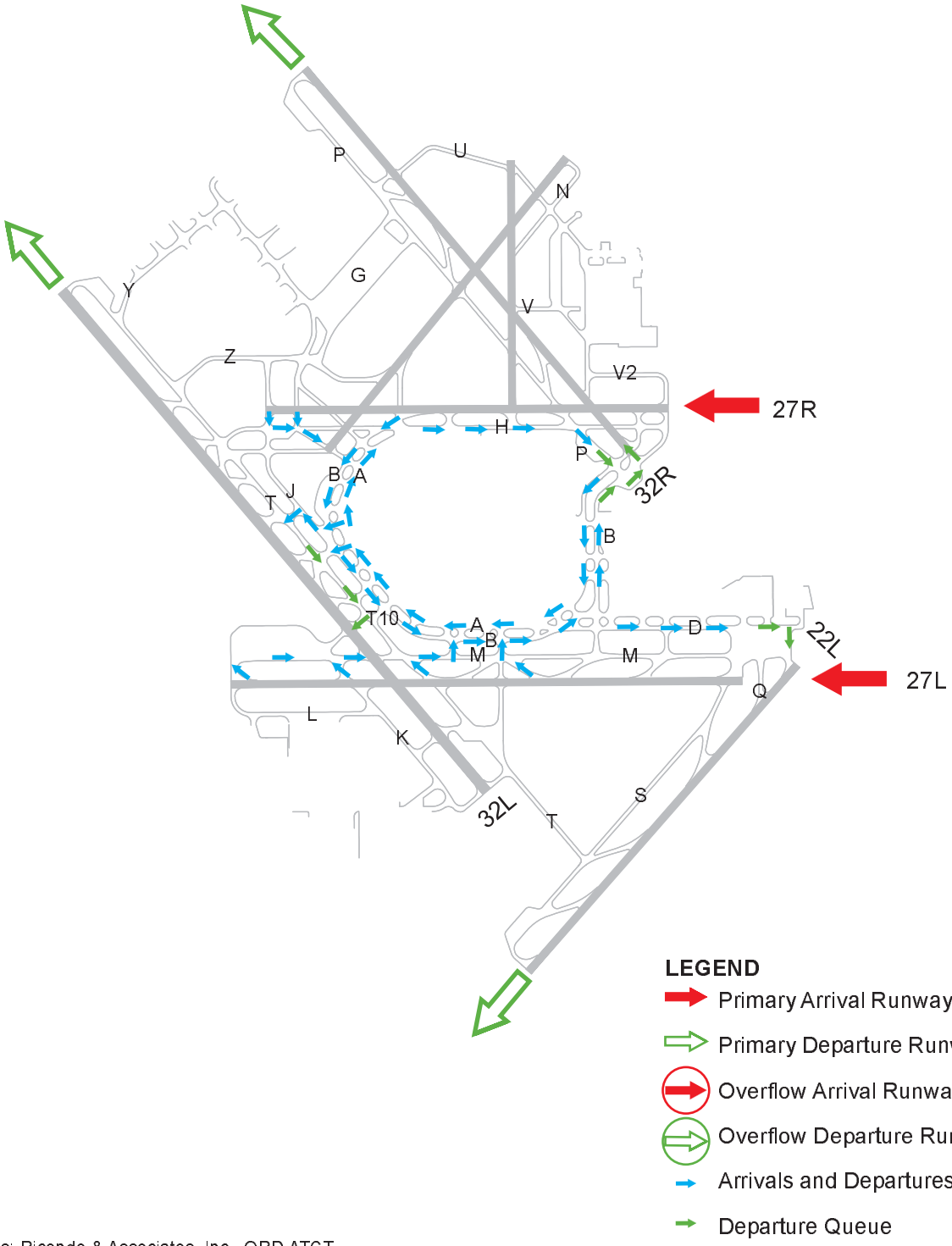
Sources: Ricondo & Associates, Inc., C90 TRACON
Prepared by: Ricondo & Associates, Inc.

Exhibit II-20

0 N.T.S.

north

Parallel 27s Airspace Routes



LEGEND

- Primary Arrival Runway
- Primary Departure Runway
- Overflow Arrival Runway
- Overflow Departure Runway
- Arrivals and Departures
- Departure Queue

Sources: Ricondo & Associates, Inc., ORD ATCT
Prepared by: Ricondo & Associates, Inc.

Exhibit II-21

0 N.T.S.

north

Parallel 27s Taxiway Routes

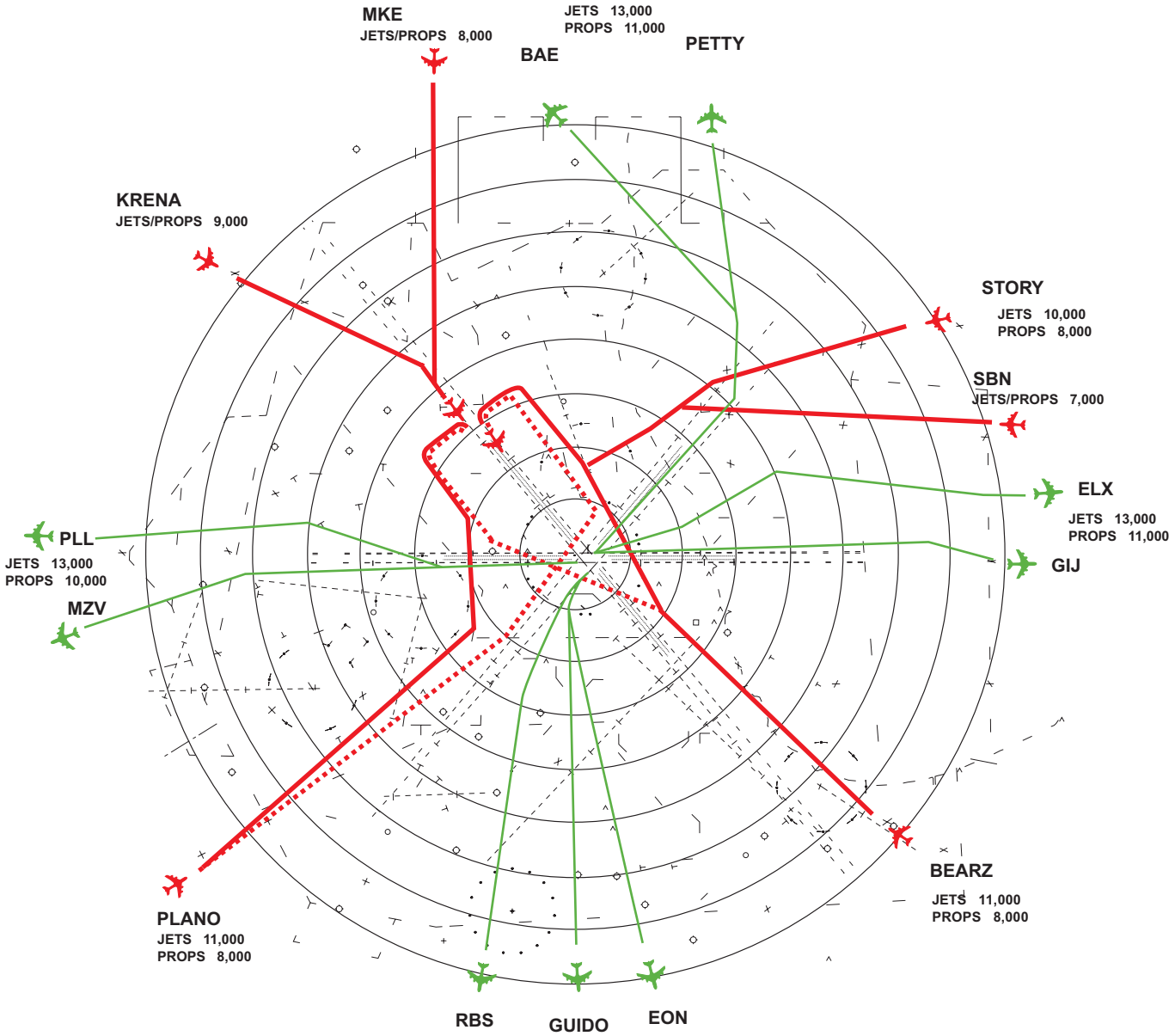
2.3.2.6 Parallel 14s

Parallel 14s is the only existing Category (CAT) II/III IMC operating configuration at the Airport. For crews that are trained and flying appropriately equipped aircraft, approaches may be conducted to CAT II/III weather minima (i.e., RVR 600 feet). Data collected from January 2000 through December 2000 demonstrates this configuration is used for 4.6 percent of annual operations.

The base operating configuration of Parallel 14s consists of aircraft arriving on Runways 14R and 14L, while aircraft depart on Runways 27L, 9L, and 22L. Triple arrivals are not permitted during IMC.

Exhibit II-22 illustrates the primary arrival and departure flight paths associated with this configuration.

- *Arrivals:* Aircraft entering the TRACON airspace from over STORY, through the BEARZ arrival gate, and in the tower en-route structure from SBN are normally assigned Runway 14L. Aircraft arriving from the PLANO or KRENA arrival gates and the tower en-route structure from MKE are normally assigned Runway 14R. Arrivals to both runways are routinely spaced 4.0 nautical miles apart at touchdown to provide sufficient separation to permit aircraft to depart on Runways 9L and 27L. During periods of heavy arrival demand, two off-load strategies are employed to balance traffic on a given route or runway. Traffic from PLANO may be vectored to a left downwind leg for Runway 14L. At other times, traffic from BEARZ may be vectored to a right downwind to Runway 14R. There are generally no off-load strategies associated with the STORY or KRENA arrival routes. Arriving aircraft maintain an altitude of 7,000 feet MSL or above until entering the appropriate descent area. Once in the descent area, aircraft routed to Runway 14L descend to 4,000 feet MSL, while aircraft vectored to Runway 14R will descend to 5,000 feet MSL. Aircraft maintain these altitudes until established on the final approach course at least 16 nautical miles from the Airport. This procedure allows for simultaneous instrument approaches to Runways 14L and 14R.
- *Departures:* Aircraft depart the TRACON airspace as indicated on Exhibit II-22. Departing aircraft are generally assigned runways that are consistent with the intended route of flight. For this configuration, northbound (BAE or PETTY) and eastbound (ELX or GIJ) departures are assigned Runway 9L. Westbound aircraft utilizing the PLL or MZV track are generally assigned Runway 27L with southbound (EON, RBS, or GUIDO) departures using Runway 22L. Runways 22L and 27L are also used to accommodate international departures routed over east and north departure fixes. Runway 14R is used for departure by aircraft bound for Pacific Rim destinations. Strategies may be used to balance demand on departure runways. During periods of peak eastbound traffic, aircraft routed over GIJ may be assigned Runway 22L with aircraft departing via GUIDO or RBS departing Runway 27L. During periods of heavy west departure demand, EON departures may be assigned Runway 9L with MZV departures moved from Runway 27L to Runway 22L.
- *Airfield Circulation:* The primary ground movements associated with this configuration are illustrated on **Exhibit II-23**. Traffic on Taxiway A travels in a clockwise direction, while traffic on Taxiway B travels in a counterclockwise direction.



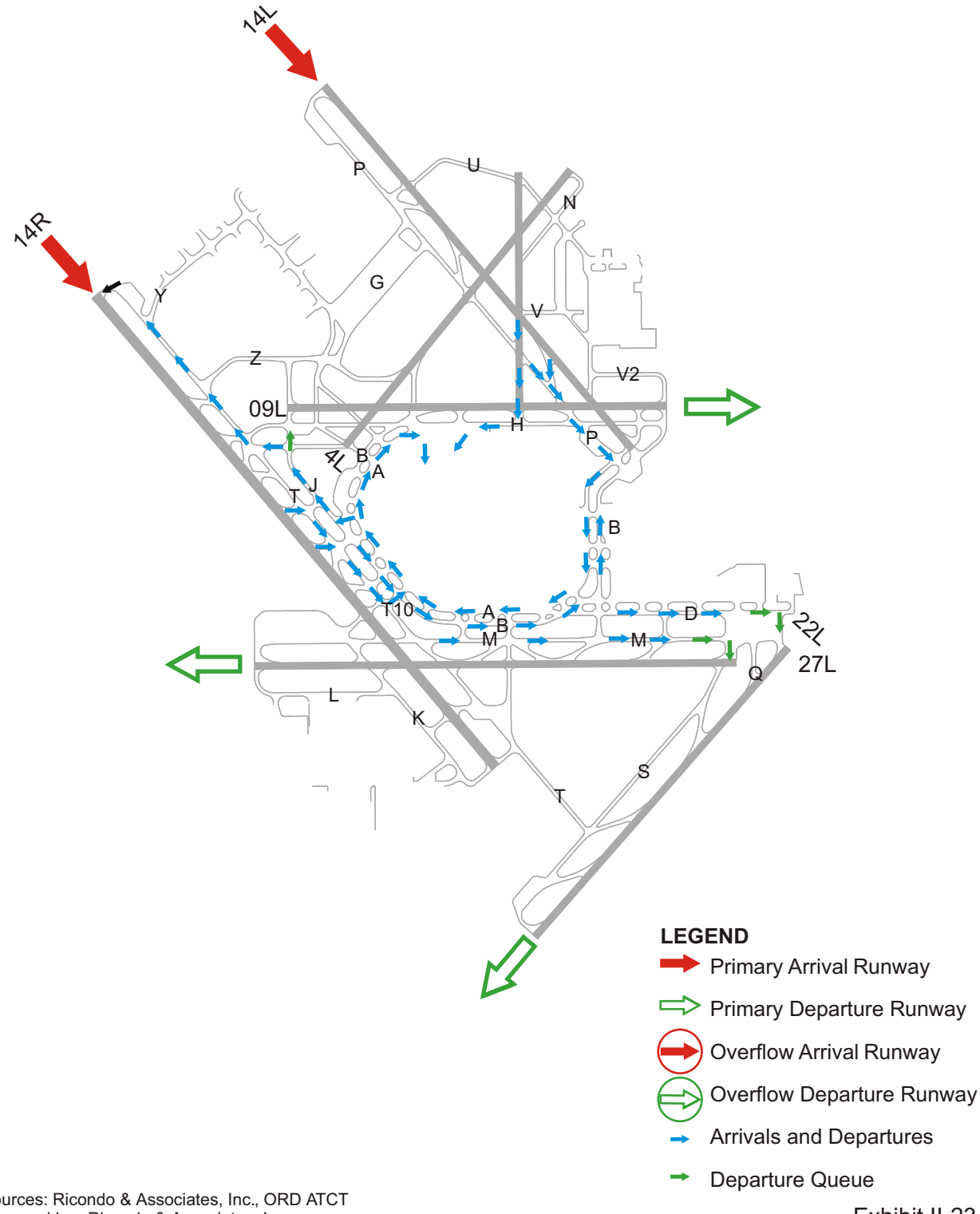
Sources: Ricondo & Associates, Inc., C90 TRACON
Prepared by: Ricondo & Associates, Inc.

Exhibit II-22

0 N.T.S.

north

Parallel 14s Airspace Routes



Sources: Ricondo & Associates, Inc., ORD ATCT
Prepared by: Ricondo & Associates, Inc.

Exhibit II-23

0 N.T.S.

north

Parallel 14s Taxiway Routes

2.4 Airfield Facilities

The Airport has seven runways, six of which are configured into three sets of parallel runways. The runways and the associated taxiways, taxilanes, aprons, and instrumentation that serve them are described below.

2.4.1 Runways

The Airport's three sets of parallel runways (Runways 14L-32R and 14R-32L, Runways 9L-27R and 9R-27L, and Runways 4L-22R and 4R-22L) and single Runway 18-36 are depicted in **Exhibit II-24**. Runways 4L-22R and 4R-22L are separated by 9,890 feet, while Runways 14L-32R and 14R-32L are separated by 6,510 feet. The remaining set of parallel runways, Runways 9L-27R and 9R-27L, are separated by a distance of 5,420 feet. All of the runways at the Airport have precision markings except for Runway 18-36, which has visual runway markings. The physical characteristics of each runway are summarized in **Table II-1**.

Table II-1

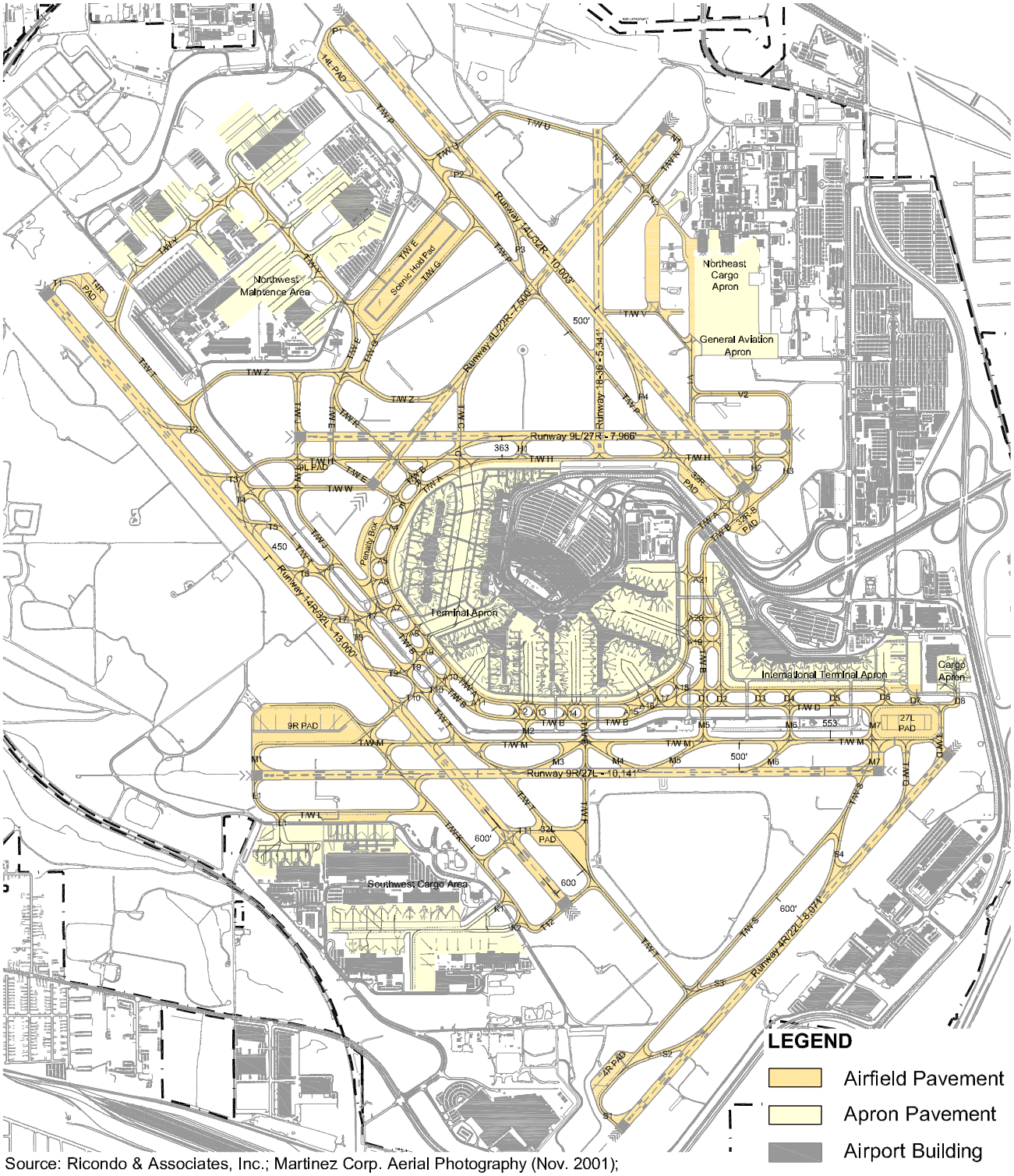
Runway Characteristics

	Runway						
	4L-22R	4R-22L	9L-27R	9R-27L	14L-32R	14R-32L	18-36
Length (feet)	7,500	8,071	7,967	10,141	10,003	13,000	5,341
Width (feet)	150	150	150	150	150	200	150
Load Bearing Capacity (x 1000 lbs)							
Single Wheel (S) (e.g., DC-3)	100	100	100	100	100	100	60
Dual Wheel (D) (e.g., B-727)	185	200	210	185	185	185	100
Dual Tandem (DT) (e.g., A330)	350	350	350	350	350	350	150
Surface Composition	Grooved Asphalt	Grooved Asphalt	Grooved Asphalt and Concrete	Grooved Asphalt and Concrete	Grooved Asphalt	Grooved Asphalt and Concrete	Un-grooved Asphalt
Markings	Precision	Precision	Precision	Precision	Precision	Precision	Visual

Source: O'Hare International Airport, Airport Layout Plan, October 2003; Aerial Photography,. November 2001; O'Hare Airport LAAS Survey, Patrick Engineering, Inc., 10/22/01
Prepared by: Ricondo & Associates, Inc.

All runways at the Airport, except Runway 18-36, are designed to accommodate ADG V and smaller aircraft. Examples of ADG V aircraft include the B-777 and A340. Runway 14R-32L is the widest and longest runway and is considered an ADG VI runway, able to handle aircraft such as the proposed A380 contingent upon airfield upgrades or operational restrictions on adjacent taxiways. Runway 18-36 is classified as an ADG III runway.

Runway 18-36 is constructed of ungrooved asphalt, while all others are constructed of concrete and grooved asphalt. The only exception to this is an ungrooved portion of the southeast end of Runway 14L-32R. The load bearing capacity of the individual runways is shown in Table II-1.



Source: Ricondo & Associates, Inc.; Martinez Corp. Aerial Photography (Nov. 2001); Department of Aviation Airport Management and Records
Prepared by: Ricondo & Associates, Inc.

Exhibit II-24

0 2400 ft.

north

Airfield Facilities

2.4.2 Taxiways and Taxilanes

Taxiway configurations are illustrated in Exhibit II-24. Each runway, with the exception of Runways 4L-22R and 18-36, has a parallel taxiway. The runway-parallel taxiway separation varies for each runway. All parallel taxiways, except for the parallel taxiway south of Runway 9L-27R, meet the FAA requirement for separation for ADG V operations. It should be noted that Runway 14R-32L, which is capable of ADG VI operations, is separated from the runway by less than the FAA-required 600 feet. Each runway has at least one 90-degree entrance/exit taxiway located at each runway end, while the ends of Runways 9R, 4L, 27R, and 32L have a second bypass taxiway at each end. All runways, with the exception of Runway 18-36, have high-speed exit taxiways.

All of the taxiways are considered movement areas controlled by the ATCT. Taxiway Y cannot be seen from the ATCT due to line-of-sight shadows cast by nearby maintenance hangars. Special procedures are enforced on this taxiway to ensure the safety of aircraft and ground equipment movements.

All taxiways at the Airport are at least 75 feet wide, able to accommodate up to ADG V aircraft. Additionally, all taxiways have 214-foot wide safety areas that support ADG V aircraft movement. The Airport has two taxiway bridges that span I-190 (the main entrance to the Airport). These bridges, located northeast of Terminal 3, have 80-foot wide taxiways with 20-foot shoulders. The taxiway centerlines on the bridges are separated by 280 feet, which allows for dual ADG V movement.

The 131-foot separation between Taxiway A and parked aircraft is appropriate for ADG I through IV; however, use of Taxiway A by ADG V is permitted with operating Taxiway A centerline lights. The taxiway separation between Taxiways A and B does not permit two B-747-400s to pass each other.

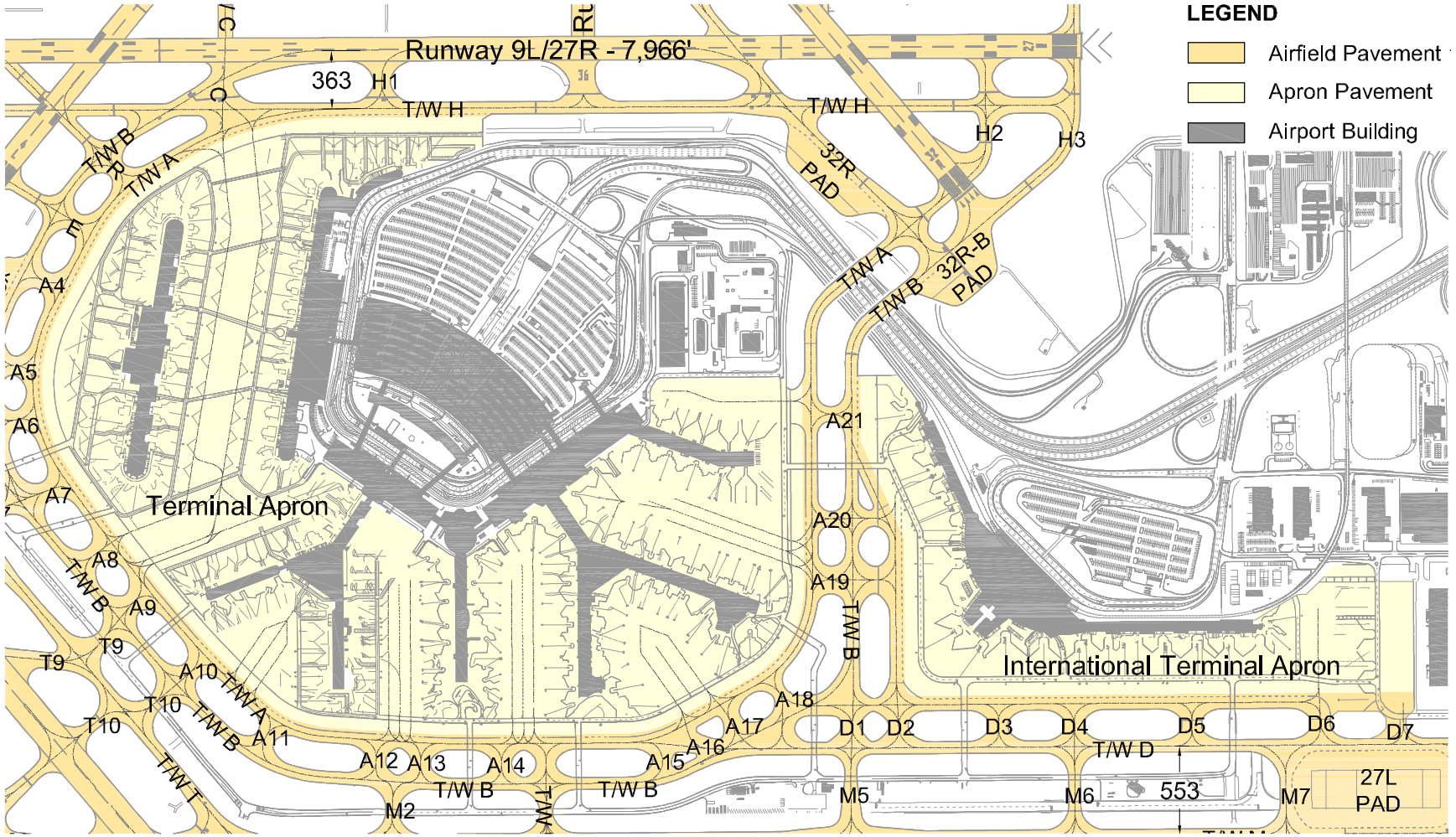
Most of the taxiways are concrete, with some patches of asphalt. Taxiways S, P, and T south of the Runway 32L Hold Pad are concrete with asphalt overlay. Taxiway Z is composed entirely of asphalt. All other taxiways are concrete with the exception of many of the taxiway transitions that contain asphalt fillets. All taxiways are equipped with edge lights.

2.4.3 Aprons and Hold Pads

For the purposes of this study, three categories of aprons and hold pads are identified:

- Terminal Aprons
- Cargo/Maintenance Aprons
- Runway Hold Pads

All aprons and hold pads are illustrated in Exhibit II-24. Detail of the passenger terminal aprons that surround the eight domestic concourses and the International Terminal is shown in **Exhibit II-25**. All terminal aprons are considered non-movement areas, which means that they are uncontrolled by ATC. Non-movement terminal aprons are typically controlled from the ramp control tower atop concourses and staffed by airline personnel. Apron alleys between Concourses F, G, and H and Concourses K and L have two taxilanes for dual movement of MD-90 and smaller aircraft or one taxilane for single movement of all aircraft up to and including ADG V. The apron alley between Concourses E and F can accommodate dual movements of B-757 and smaller aircraft or single



Source: Ricondo & Associates, Inc.; Martinez Corp. Aerial Photography (Nov. 2001); Department of Aviation Airport Management and Records
Prepared by: Ricondo & Associates, Inc.

Exhibit II-25

0 1000 ft.

north

Airfield Facilities
Passenger Terminal Apron