## **Madrid T4 Airport Simulation Report**

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#### **Overall Statistics**

Total Passengers	33053
Processed Passengers	33053
Average Total Time	16.5 minutes
Maximum Total Time	52.3 minutes
Minimum Total Time	0.3 minutes

Flight & Passenger Distribution Statistics

Total Flights	230
Overbooked Flights	2 (0.9%)
Average Overbooking Factor	1.03x
Average Load Factor	0.92 (target)
Passenger Distribution	Normal distribution
Overbooking Rate	2.0% of flights
Max Overbooking	1.10x capacity

### Passenger Distribution by Flight

Metric	Value
Average Passengers per Flight	143.7
Minimum Passengers	66
Maximum Passengers	265
Standard Deviation	34.4

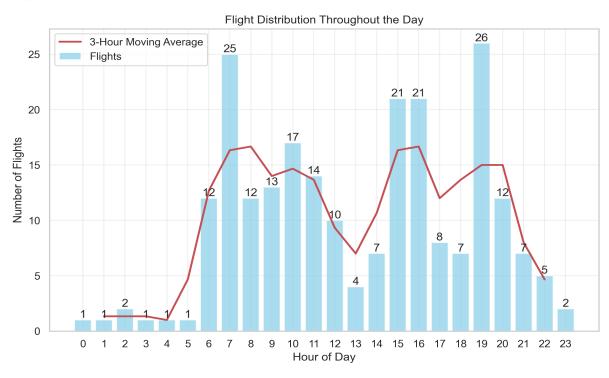
### **Station Performance**

Metric	Check-in	Security	Passport	Boarding
Average Wait (min)	1.4	7.6	5.5	6.7
Maximum Wait (min)	5.7	30.9	26.0	25.9
Average Queue Length	9.4	146.5	27.8	130.4
Maximum Queue	154.0	1349.0	400.0	414.0

## **Resource Utilization Analysis**

Station	Average	Peak	Minimum
Checkin	11.5%	100.0%	0.0%
Security	45.6%	100.0%	0.0%
Passport	30.0%	100.0%	0.0%
Boarding	73.3%	100.0%	0.0%

# **Flight Distribution**



Time Period	Number of Flights
Morning (6-10)	62

Midday (10-14)	45
Afternoon (14-18)	57
Evening (18-22)	52
Night (22-6)	14