

Madrid T4 Airport Simulation Report

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Overall Statistics

Total Passengers	33072
Processed Passengers	33072
Average Total Time	9.0 minutes
Maximum Total Time	33.5 minutes
Minimum Total Time	0.2 minutes

Baggage Statistics

Metric	Value
Total Bags	63952
Passengers with Bags	18258 (55.2%)
Average Bags per Passenger	1.93
Average Bags per Passenger with Bags	3.50
Maximum Bags for a Passenger	13

Flight & Passenger Distribution Statistics

Total Flights	230
Overbooked Flights	4 (1.7%)
Average Overbooking Factor	1.04x
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	143.8
Minimum Passengers	71
Maximum Passengers	271
Standard Deviation	36.0

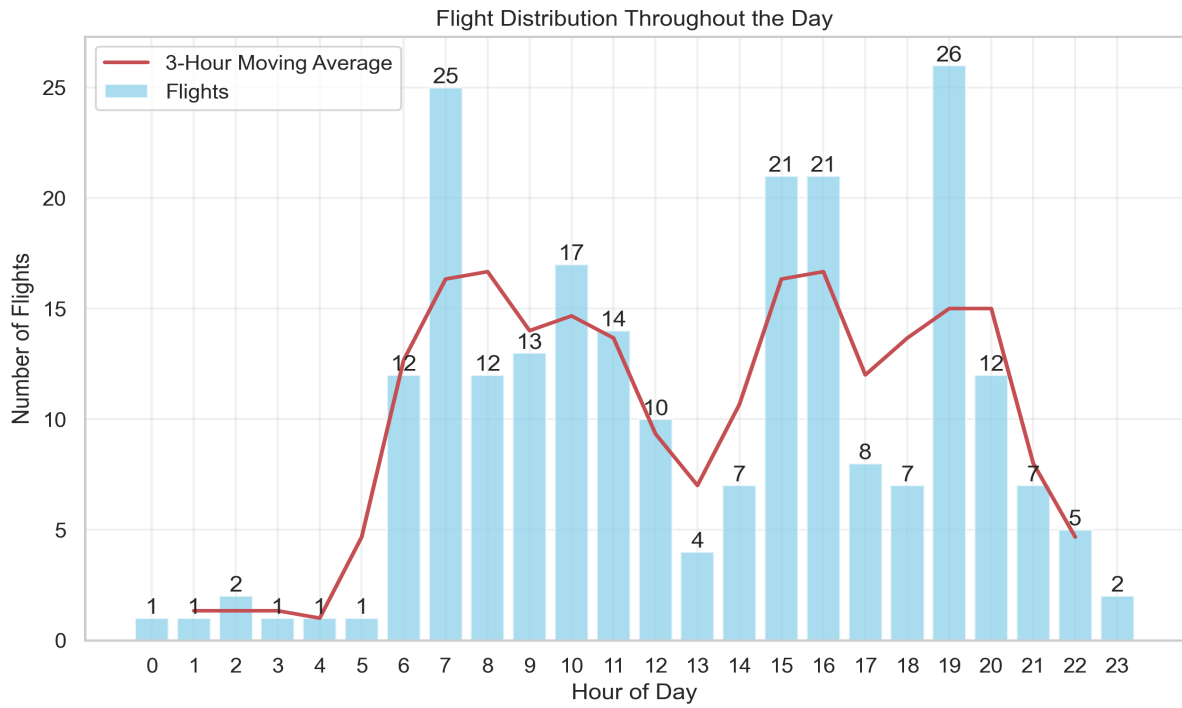
Station Performance

Metric	Check-in	Security	Passport	Boarding
Average Wait (min)	2.2	6.2	0.3	1.6
Maximum Wait (min)	12.9	29.2	1.4	6.0
Average Queue Length	16.9	113.8	0.2	31.6
Maximum Queue	216.0	1000.0	8.0	130.0

Resource Utilization Analysis

Station	Average	Peak	Minimum
Checkin	13.3%	100.0%	0.0%
Security	43.3%	100.0%	0.0%
Passport	11.0%	100.0%	0.0%
Boarding	54.8%	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