



Ground Operations

Operational Safety Instruction

Operation of Royal Suite apron, stands 457, 457L, 457R and stand 458

16th August 2020

ASGrOps_OSI_034

V2.1

It is the responsibility of all employers to ensure that relevant OSIs are brought to the attention of their staff. However, individuals remain responsible for their own actions and those who are in any doubt should consult their Supervisor or Manager.

1. Introduction

- 1.1 The purpose of this OSI is to promulgate the layout and operating procedures for the Royal Suite Apron.
- 1.2 ASGrOps_OSI_034 v2.0 is hereby cancelled.
- 1.3 Red bars have been added to the side of the document to draw the reader's attention to where changes have been made.

2. Definitions

Abbreviation	Description
AOU	Aircraft Operations Unit
ATC	Air Traffic Control
PPE	Personal Protective Equipment
VHF	Very High Frequency

- 2.1 For the purpose of this instruction the term:
 - i. 'Apron' is the area used for servicing and parking of aircraft.
 - ii. 'Manoeuvring Area' is the area used for the taxi, take-off and landing of aircraft.



3. Centreline Designation and Operation

- 3.1 The Royal Suite Apron stand centrelines are designated 457, 457L, 457R and 458. A drawing of the apron is included at the end of this Instruction (Appendix A). Appendix B shows aircraft dimensions by aircraft type.
- 3.2 The following table lists the maximum size of aircraft and any specific operating procedures for each stand centreline:

Centreline Designation	Aircraft Operation
457R	Maximum Wingspan: 36.0m. Maximum Length: 37.6m. Typical max aircraft: A320 with sharklets, B737-MAX 7 & B737-700W Able to accommodate: Restricted Code C Aircraft
457L	Maximum Wingspan: 36.0m. Maximum Length: 44.5m. Typical max aircraft: A321 with sharklets Able to accommodate: Code C Aircraft
457	Maximum Wingspan: 61.0m Maximum Length: 64.0m. Typical max aircraft: B777-200, A321 with sharklets, B737 MAX 10 & B737-900W Able to accommodate: Restricted Code E (cannot accommodate a/c with wingspans greater than 61.0m, unable to accommodate B777-200LR). Arriving aircraft: Stand 456 is to be clear of aircraft and equipment prior to aircraft parking on Stand 457. Departing aircraft: Ground handlers must undertake a non-standard pushback from Stand 457 and have a working protocol for turning the aircraft away from Stand 456 immediately the pushback commences so there is no requirement for Stand 456 to be clear of aircraft.



458

Maximum Wingspan: 65.0m
 Maximum Length: 75.3m
 Typical max aircraft B747-400, A340-600
 Able to accommodate: Code E Aircraft

Stand 456 is to be clear of aircraft prior to aircraft parking on Stand 458. Any vehicles or equipment parked on Stand 456 in support of the 'red carpet' movement are to be parked in such a position as to not cause an obstruction.

Stand 458 is primarily for 'red carpet' movements. Other movements require prior approval by the Airfield Duty Manager (AfDM), AOU & VIP Operations Team.

Aircraft with a wingspan up to 38.1m (e.g. B757-200) will not impact Taxiway Whiskey. For aircraft with a wingspan between 38.1m and 52.0m (e.g. max B767-400), Taxiway Whiskey abeam the Royal Suite Apron will either be restricted to Code E aircraft (max wingspan 65.0m e.g. B747-400) or will have to be closed.

For aircraft with a wingspan between 52.0m and 65.0m, (e.g. max B747-400), Taxiway Whiskey abeam the Royal Suite Apron will be restricted to Code D aircraft (max wingspan 52.0m, e.g. B767-400) or will have to be closed.

The AfDM will advise NATS of any restrictions or closures.

Airside Operations, VIP Operations Team and the Airline / Handling agent will plan in advance a process to manage the turnround on a case-by-case basis which will include the operational status of Taxiway Whiskey.

The execution of the plan will be the responsibility of the AfDM.

4. Apron Infrastructure

There are no stand number indicator boards, fixed electrical ground power, ground fuel hydrant points or Stand Entry Guidance provided for any of the stand centrelines. There is a head of stand telephone available.



5. Marshalling Service

- 5.1** Heathrow Airside Operations will provide a marshalling and/or leader service for all powered movements on to the Royal Suite Apron centrelines.
- 5.2** The Heathrow Aircraft Operations Unit shall ensure that Airside Operations are aware of any powered movement onto the Royal Suite Apron, **and** any towed movement onto Stands 457 and 458.
- 5.3** ATC will direct arriving aircraft to the Royal Suite Apron and to await marshalling instructions. After the aircraft has parked, the marshaller shall contact ATC via VHF to confirm whether a restriction to the operation of Taxiway Whiskey is required.
- 5.4** For **towed movements** onto Stand 458, the ground handling company must first contact Airside Operations who will ensure that an airfield officer is in attendance for the movement. After the aircraft has parked on stand, the airfield officer will contact ATC via VHF, using table 3.2 as guidance, to confirm whether a restriction to the operation of Taxiway Whiskey is required.

6. Ground Handling Equipment

- 6.1** Handling agents should note that no equipment of any kind may be left on the Royal Suite Apron beyond the time it is reasonably required. Long term parking of ground service equipment is not permitted on these stands.
- 6.2** Heathrow supplies 8 cones for each stand to, at a minimum, indicate appropriate clearance for engine pods and wing tips. Additionally, Heathrow supplies aircraft chocks suitable for all anticipated aircraft types. On wide body stands there are 10 supplied with 6 on narrow bodied stands. These can be supplemented with the airline or ground handlers own stock if required. The use of chocks and cones is mandatory.
- 6.2.1** If these are not available on the stand replacements can be requested from Airside Operations on 020 8745 6459.



7. Ramp Safety

- 7.1** As there are no airbridge facilities on these stands all aircraft movements will require passengers to walk across the ramp area. It is therefore essential that ground staff have enough personnel to safely monitor passengers and ensure they do not deviate from the intended safe walking route whilst on the apron.
- 7.1.1** Due to the nature of the aircraft types using these stands there may be occasions when passengers are on the port and starboard sides of the aircraft during turnarounds. Ground personnel must remain vigilant to the extra hazards this presents whilst monitoring passenger movement on the apron area.
- 7.2** It is mandatory for all personnel operating anywhere in the external airside environment to wear a high visibility vest or jacket. This garment must be fully fastened.
- 7.3** Any personnel who are working on the apron area must wear protective footwear at all times.
- 7.3.1** Flight crew are exempt from wearing safety shoes when carrying out the walk around check of an aircraft. They are required to wear high visibility clothing.
- 7.3.2** Pedestrians using designated walking routes and crossings are not required to wear safety shoes airside.
- 7.4** Employers are required to provide hearing protection for employees where noise levels exceed 80db(A) and must ensure that it is worn where noise levels exceed 85db(A). Therefore, employees must carry hearing protection when working on operational aircraft stands.
- 7.5** Hold passenger baggage must not be handled by passengers at any time.



7.6 Further mandated processes and regulations relating to apron safety are detailed in the following OSI's:

- i. ASGrOps_OSI_021 Aircraft Departure Procedures on Stand
- ii. ASGrOps_OSI_022 Aircraft Turnround Procedures
- iii. ASGrOps_OSI_023 Aircraft Departure Procedures off Stand
- iv. ASGrOps_OSI_042 Use of Personal Protective Equipment Airside

8. Enquiries

Any questions concerning this Instruction should be addressed to Airfield Duty Manager (AfDM) Telephone: 0208 745 7373.



Appendix A



Appendix B

Standard aircraft type and dimensions. To be used as guidance only.

AIRCRAFT TYPE	WING SPAN (m)	LENGTH (m)	HEIGHT (m)	Fuselage Width (m)	WHEEL TRACK (m)	OMGW/S (m)	WHEEL BASE (m)	ENGINE LINE		MTOW (kg)	FIRE CAT	CODE
								(m)	center of fuselage-engine center line			
ANTONOV AN148	28.91	29.13	8.19	n/a	n/a	4.00	n/a	n/a	n/a	43,700	6	C
Bombardier CRJ1000	26.18	39.13	7.50	2.70	4.11	4.99	n/a	n/a	n/a	41,640	7	C
Bombardier CRJ900	24.85	36.20	7.51	2.70	4.11	4.99	17.29	n/a	n/a	38,330	6	C
ATR 42	24.57	22.67	7.66	2.87	4.10	5.00	8.78	4.05	n/a	16,150	4	C
Embraer 170	26.00	29.90	9.85	3.01	5.20	5.67	10.60	n/a	n/a	37,200	6	C
Bae 146-100/Avro RJ70/RJX70	26.34	26.16	8.61	3.56	4.72	5.85	10.09	n/a	n/a	38,102	5	C
Bae 146-200/Avro R85/RJX85	26.34	28.55	8.61	3.56	4.72	5.85	11.20	n/a	n/a	42,184	6	C
Bae 146-300/Avro RJ100/RJX100	26.34	30.99	8.59	3.56	4.72	5.85	12.52	n/a	n/a	44,225	6	C
Boeing 717-200	28.40	37.80	9.00	3.40	4.9	5.90	17.60	3.30	n/a	54,884	6	C
Boeing 737-300 (with wingslets)	31.22	33.40	11.13	3.76	5.23	6.41	12.45	4.83	n/a	63,276	6	C
Boeing 737-500 (with wingslets)	31.12	31.01	11.15	3.76	5.23	6.41	11.07	4.83	n/a	61,689	6	C
Boeing 737-300	28.88	33.40	11.15	3.76	5.23	6.41	12.45	4.83	n/a	63,276	6	C
Boeing 737-400	28.88	36.40	11.15	3.76	5.23	6.41	14.27	4.83	n/a	68,039	6	C
Boeing 737-500	28.88	31.01	11.15	3.76	5.23	6.41	11.07	4.83	n/a	61,689	6	C
B737 MAX7	35.92	33.63	12.50	n/a	5.72	7.00	12.60	n/a	n/a	72,348	6	C
B737 MAX8	35.92	39.47	12.42	n/a	5.72	7.00	15.60	n/a	n/a	82,191	7	C
B737 MAX9	35.92	42.11	12.40	n/a	5.72	7.00	17.17	n/a	n/a	88,314	7	C
Boeing 737-600 (with wingslets)	35.79	31.24	12.57	3.76	5.72	7.00	11.23	4.83	n/a	65,544	6	C
Boeing 737-700 (with wingslets)	35.79	33.63	12.57	3.76	5.72	7.00	12.60	4.83	n/a	70,080	6	C
Boeing 737-800 (with wingslets)	35.79	39.47	12.55	3.76	5.72	7.00	15.60	4.83	n/a	79,016	7	C
Boeing 737-900 (with wingslets)	35.79	42.11	12.55	3.76	5.72	7.00	17.17	4.83	n/a	79,016	7	C
Boeing 737-900ER (with wingslets)	35.79	42.11	12.55	3.76	5.72	7.00	17.17	4.83	n/a	85,139	7	C
Boeing 737-900ER (w/out wingslets)	34.32	42.11	12.55	3.76	5.72	7.00	17.17	4.83	n/a	85,139	7	C
ATR 72	27.05	27.17	7.72	2.87	4.10	7.00	10.77	4.05	n/a	22,500	5	C
Boeing 727-100	32.92	40.59	10.44	3.76	5.72	7.01	16.23	2.82	n/a	77,000	7	C
Boeing 727-200/200ADV	32.92	46.68	10.65	3.76	5.72	7.10	19.28	2.82	n/a	95,100	7	C
Saab 340A/B*	21.44	19.73	7.10	2.31	6.71	7.26	7.14	n/a	n/a	12,927	4	C
Embraer EMB 120 Brasilia*	19.78	20.00	6.53	2.28	6.58	7.29	6.98	3.29	n/a	11,990	4	C
Fokker 50	29.00	25.25	8.32	2.70	n/a	7.90	9.70	n/a	n/a	20,820	5	C
Fokker 60 Utility	29.00	26.87	8.34	2.70	7.20	7.90	10.72	n/a	n/a	22,950	5	C
Fokker F27 Friendship 200/400/600	29.00	23.56	8.76	2.69	7.20	8.00	8.74	n/a	n/a	20,412	4	C
Fokker F27 Friendship 500	29.00	25.06	8.90	2.69	7.20	8.00	9.74	n/a	n/a	20,412	5	C
DHC Dash 7	28.35	24.54	7.98	2.79	7.16	8.00	8.38	n/a	n/a	21,340	5	C
Gulfstream I	23.88	22.96	7.01	2.39	7.47	8.34	6.04	n/a	n/a	15,241	4	C
Bae 748-2B/Supercr 2	31.24	20.42	7.56	2.67	7.54	8.46	6.30	n/a	n/a	21,092	4	C
Bae 748-1/2/2A	30.02	20.42	7.62	2.67	7.54	8.46	6.30	n/a	n/a	17,916	4	C
Douglas DC-6A/B	35.81	32.18	8.92	n/a	n/a	8.63	n/a	n/a	n/a	48,534	6	C
Convair 580	32.18	24.84	8.89	n/a	n/a	8.66	n/a	n/a	n/a	24,766	5	C
AIRBUS A318-100 SHARKLETS	35.80	31.45	12.89	3.95	7.59	8.95	10.25	5.75	n/a	68,000	6	C
AIRBUS A319 NEO	35.80	33.84	12.11	3.95	7.59	8.95	11.04	5.75	n/a	75,500	6	C
AIRBUS A319-100 CEO SHARKLETS	35.80	33.84	12.11	3.95	7.59	8.95	11.04	5.75	n/a	76,500	6	C
AIRBUS A320 NEO	35.80	37.57	12.08	3.95	7.59	8.95	12.64	5.75	n/a	79,000	6	C
AIRBUS A320-200 CEO SHARKLETS	35.80	37.57	12.08	3.95	7.59	8.95	12.64	5.75	n/a	78,000	6	C
Airbus A318-100*	34.10	31.45	12.89	3.95	7.59	8.95	10.25	5.75	n/a	68,000	6	C

