

**OPERATIONAL SAFETY INSTRUCTION**

Version A

Issued 01/09/2020

Aircraft Pushback Procedures

Issued By Airside Operations
and Safety Manager

Ref BRS-OSI-GO-017

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

This instruction sets out the procedures for aircraft pushbacks that are to be used at Bristol Airport. For the purposes of this instruction, the term 'pushback' refers to the movement of an aircraft with mechanical assistance, moving rearward from its' parking position.

Specific pushback manoeuvres for each aircraft parking stand are contained in a separate pushback guide, available on request from airside operations.

2. HANDLING AGENT RESPONSIBILITIES**2.1. Company Procedures**

Detailed procedures relating to the pushback operation shall be written by handling agents, based on the content of this instruction.

2.2. Training

Handling agents are required to provide their teams with training in the operation of pushback tugs, aircraft towing and use of headsets. Training and proficiency records must be retained and made available to airside operations on request.

2.3. Use of Headsets

All pushbacks should be performed with a serviceable headset; however, exceptions apply in the following circumstances in which case ICAO compliant hand signals may be used:

- Prevailing weather conditions (thunderstorms) which prevent the use of a headset
- Aircraft which are not equipped with a ground intercom facility
- Aircraft headset port unserviceability

It is the responsibility of the flight deck to notify ATC if two-way headset communication with the ground crew is lost prior to, or during a pushback. Following notification of headset

unserviceability, the standard pushback procedure for that stand must be followed. Non-standard pushback requests will not be approved. ATC will not issue any conditional pushback clearances to aircraft. Pushbacks where two-way communication is not established will not take place in low visibility operations and a serviceable headset must be sourced for the pushback to commence. In the event that either a standard, or non-standard pushback has already commenced, and two-way communication with the ground crew is lost, the pushback will continue as agreed with the ground crew using hand signals.

3. SAFETY PRECAUTIONS

The following safety precautions shall be adhered to whilst conducting pushback operations.

- Flight deck and ground crews must always remain in verbal or visual contact.
- Ground crews are responsible for ensuring that the area immediately behind an aircraft is clear of personnel, vehicles and equipment.
- Pushback tug drivers must ensure they are maintaining a listening watch on the ATC tower frequency before, during, and immediately after pushback.
- The tug and towbar/shear-pin combination must be suitable for the operation.
- The tug must be in the appropriate drive mode prior to the commencement of the operation.
- Chocks must not be removed from the aircraft until the tug and towbar are fully secured to the nose-gear.
- When connecting the towbar to the aircraft's nose-gear assembly, the towbar must be detached from the tug.
- When connecting the towbar to the tug, personnel must be facing the tug.
- The tug and towbar should be in-line with the centreline of the aircraft before the pushback commences.
- The tug must not be left unattended with the engine running.
- The wheels on the towbar must be fully retracted/off the ground before the pushback commences.
- Personnel must not step across the towbar whilst the pushback operation is in progress.
- In the event of any equipment malfunction during pushback, the headset operator shall instruct the flight deck to gently apply the aircraft brakes. No attempt must be made to move the aircraft until the reason for the malfunction has been determined and rectified.
- Wingwalkers shall be provided to safeguard the rearward movement of the aircraft and prevent collisions with other aircraft, vehicles or obstacles. This person will also act as the rear of stand 'road-man' to stop vehicles on the rear of stand road system.
- All hand signals shall conform to ICAO or industry best practise (if not designated) and shall be clear and unambiguous.

4. STANDARD / NON-STANDARD PUSHBACKS

The majority of stands at Bristol will have a standard prescribed pushback, whereby an aircraft is cleared to push onto the taxiway or into a cul-de-sac, depending on the stand location. This is fully described for each stand in Appendix A.

On some occasions due to the ground traffic situation, obstacles or work in progress, a non-standard pushback is required. In these situations, an alternative non-standard pushback instruction will be issued to the flight deck by ATC. Non-standard pushback information shall be communicated from the flight deck to the headset operator in the pushback team and then on to the pushback driver. Pushback teams are not required to contact ATC to confirm non-standard pushback instructions issued by ATC.

5. PUSHBACK CLEARANCE AND INSTRUCTIONS

Pushbacks shall never be commenced without ATC permission. ATC will give push/start approval at the same time, with aircraft engines not exceeding idle power.

To avoid a pushback error and the potential for collision it is a Bristol Airport requirement that pushback tug drivers listen to ATC pushback clearances and instructions.

It is mandatory that pushback drivers are equipped with a hand-held radio or the pushback tug is fitted with a radio capable of accessing Bristol Tower frequency 133.850. Pushback drivers should only commence a pushback when they are satisfied that there is no discrepancy between the instruction issued by Bristol Tower and that given by the headset operator.

In the event that pushback drivers have not clearly heard/understood the instruction or where the pushback would put them into conflict with another aircraft or vehicle they should, via the headset operator, contact the flight deck and request a reissuing of instruction by Bristol Tower. ***Pushback crews are encouraged to challenge any confusing or uncertain instructions.***

5.1. Push-back onto Vacant Stands

Pushback crews are authorised to push an aircraft back onto an opposite or adjacent stand if the stand is vacant and clear of all ground equipment, and the pushback crew consider it to be the safer alternative than pushing into a cul-de-sac. Examples of where this may be utilised are stands 12 and 30, where there is limited space to push-back into the cul-de-sac before intercepting the apron road system.

The wingwalker is responsible for ensuring the stand being pushed onto is clear of obstructions and informing any drivers or pedestrians of their intentions. No communication with ATC is required.

5.2. Tug Release Points

Following pushback from cul-de-sac stands, the aircraft nose wheel should be stopped on the Tug Release Point (TRP) marking, which is a horizontal yellow bar on the cul-de-sac centreline (labelled).

Pushbacks directly onto the taxiway should push to line up with the centreline and then continue to push or pull forwards to achieve safe separation from other aircraft on the taxiway system or aircraft simultaneously pushing.

6. SIMULTANEOUS PUSHBACKS

Simultaneous pushbacks may be available for some stands, subject to ATC clearance. Although Bristol Airport approves the use of simultaneous pushbacks, adequate ground handling controls need to be in place prior and ground crews are empowered to suspend any pushback movement that they consider to be unsafe due to jet blast, reduced separation or other hazard. See Appendix B.

Simultaneous pushbacks from stands 1-3R and stands 37-39 shall not be available when the airport is in low visibility operations.

7. NOSE GEAR STEERING LIMITS

Aircraft pushbacks must be completed in a way such that the nose gear steering limits for each individual aircraft type are not exceeded. There is a red line 'oversteer indicator' that must not be exceeded, otherwise there is an increased risk of shear pin failure or damage to the aircraft nose gear.

8. PUSH AND HOLD OPERATIONS

Bristol Airport offer a push and hold operation to departing aircraft, when ATC have advised of an expected significant delay for take-off so as to allow their flights to record an on-time departure and/or to clear a stand for re-use. It involves an aircraft ground-positioning, either under its own power or under tow, to a designated remote (non-contact) parking stand. Here, the engines are shut down and aircraft services are maintained by the use of the APU until engine re-start is authorised by ATC.

The full procedure can be found in BRS-OSI-GO-004 Aircraft Push and Hold Operations.

9. GENERAL ENQUIRIES

Any enquiries should be addressed to Airside Operations on **01275 473705** or **07712 792235**.

APPENDIX A INDIVIDUAL STAND STANDARD / NON-STANDARD PUSHBACKS

Stand 1		Max aircraft size B737-800(W) / A321
Standard Pushback Procedure	Push straight back until rear of stand road, then face east or west according to the departure runway.	
Simultaneous Pushback	Not with stand 2	
Remarks	The aircraft pushes onto a live taxiway that may delay other inbound or outbound taxiing aircraft. ATC may request a push and pull forward procedure to increase separation between simultaneous pushbacks.	

Stand 2		Max aircraft size B737-800(W) / A321
Standard Pushback Procedure	Push straight back until rear of stand road, then face east or west according to the departure runway.	
Simultaneous Pushback	Not with stands 1 or 3	
Remarks	The aircraft pushes onto a live taxiway that may delay other inbound or outbound taxiing aircraft.	

Stand 3		Max aircraft size B737-800(W) / A321
Standard Pushback Procedure	Push straight back until rear of stand road, then face east or west according to the departure runway.	
Simultaneous Pushback	Not with stand 2	
Remarks	The aircraft pushes onto a live taxiway that may delay other inbound or outbound taxiing aircraft. ATC may request a push and pull forward procedure to increase separation between simultaneous pushbacks.	

Stand 3R		Max aircraft size B757-200
Standard Pushback Procedure	Push straight back until rear of stand road, then face east or west according to the departure runway.	
Simultaneous Pushback	Not with stand 2	
Remarks	The aircraft pushes onto a live taxiway that may delay other inbound or outbound taxiing aircraft. ATC may request a push and pull forward procedure to increase separation between simultaneous pushbacks.	

Stand 5		Max aircraft size B737-800(W) / A320
Standard Pushback Procedure	Push into cul-de-sac to face south, pull forward to TRP.	
Simultaneous Pushback	n/a	
Remarks	Flight crew must not be authorised by the headset operator to start engines until forward to the TRP due to jet blast. Pushback should not commence if an aircraft is self-maneuvring from stand 9 or 10.	

Stand 6		Max aircraft size B737-800(W) / A320
Standard Pushback Procedure	Push into cul-de-sac to face south, pull forward to TRP.	
Simultaneous Pushback	n/a	
Remarks	<p>Flight crew must not be authorised by the headset operator to start engines until forward to the TRP due to jet blast. Pushback crew should hold short of the TRP if an aircraft is self-manoeuving from stand 9 or 10.</p> <p>If stand 7N is occupied, aircraft to be pushed back direct onto taxiway Zulu. Aircraft can be pushed back into the opposite stand if it is empty, and pulled forward to the TRP.</p>	
Stand 7		Max aircraft size A320
Standard Pushback Procedure	<p>Facing east: push into cul-de-sac to face south, pull forward to TRP.</p> <p>Facing west: pull forward into cul-de-sac to face south at TRP.</p>	
Simultaneous Pushback	n/a	
Remarks	<p>Flight crew must not be authorised by the headset operator to start engines until pulled forward to the TRP due to jet blast. Pushback crew should hold short of the TRP if an aircraft is self-manoeuving from stand 9 or 10.</p> <p>This stand is only available for self-manoeuving if all EPAs are clear of equipment and the opposite stand is vacant.</p> <p>Pull forward through stand 12 if stand 7N is occupied.</p>	
Stand 7N		Max aircraft size B737-800(W) / A320
Standard Pushback Procedure	Push direct onto taxiway Zulu, face east or west as instructed.	
Simultaneous Pushback	n/a	
Remarks	<p>If this stand is occupied, stands 6 and 8 will push back directly onto taxiway Zulu, or into an empty stand and pull forward to the TRP. Stand 8 can taxi-through if stand 11 is empty.</p> <p>This stand is only available for first wave departures and late arrivals, and not for turnarounds.</p>	

Stand 8	Max aircraft size A320
Standard Pushback Procedure	Facing east: push into cul-de-sac to face south, pull forward to TRP. Facing west: pull forward into cul-de-sac to face south at TRP.
Simultaneous Pushback	n/a
Remarks	<p>Flight crew must not be authorised by the headset operator to start engines until pulled forward to the TRP due to jet blast. Pushback crew should hold short of the TRP if an aircraft is self-maneuvring from stand 9 or 10.</p> <p>This stand is only available for self-maneuvring if all EPAs are clear of equipment and the opposite stand is vacant.</p> <p>If stand 7N is occupied, aircraft to be pushed back direct onto taxiway Zulu. Aircraft can be pushed back into the opposite stand if it is empty, and pulled forward to the TRP.</p>

Stand 9	Max aircraft size A320
Standard Pushback Procedure	Facing east: push into cul-de-sac to face south, pull forward to TRP. Facing west: pull forward into cul-de-sac to face south at TRP.
Simultaneous Pushback	n/a
Remarks	<p>Flight crew must not be authorised by the headset operator to start engines until pulled forward to the TRP due to jet blast.</p> <p>Self-maneuvring option available if stand 10 is vacant.</p> <p>B737-800 aircraft may use this stand for push and hold operations.</p>

Stand 10	Max aircraft size A320
Standard Pushback Procedure	Facing west: push into cul-de-sac to face south, pull forward to TRP. Facing east: pull forward into cul-de-sac to face south at TRP.
Simultaneous Pushback	n/a
Remarks	<p>Flight crew must not be authorised by the headset operator to start engines until pulled forward to the TRP due to jet blast.</p> <p>Self-maneuvring option available if stand 9 is vacant.</p> <p>B737-800 aircraft may use this stand for push and hold operations.</p>

Stand 11	Max aircraft size A320
Standard Pushback Procedure	Facing west: push into cul-de-sac to face south, pull forward to TRP. Facing east: pull forward into cul-de-sac to face south, pull forward to TRP
Simultaneous Pushback	n/a
Remarks	Flight crew must not be authorised by the headset operator to start engines until forward to the TRP due to jet blast. This stand is only available for self-manoeuving if all EPAs are clear of equipment and the opposite stand is vacant. Alternative pushback onto empty adjacent stands is permitted.

Stand 12	Max aircraft size A319
Standard Pushback Procedure	Facing west: push into cul-de-sac to face south, pull forward to TRP. Facing east: pull forward into cul-de-sac to face south, pull forward to TRP
Simultaneous Pushback	n/a
Remarks	Flight crew must not be authorised by the headset operator to start engines until forward to the TRP due to jet blast. This stand is only available for self-manoeuving if all EPAs are clear of equipment and the opposite stand is vacant. Alternative pushback onto empty opposite or adjacent stands is permitted followed by a pull to the TRP. A dog-leg push may be required due to space constraints.

Stand 13 / 14 / 15	Max aircraft size A319
Standard Pushback Procedure	Push into cul-de-sac to face south, pull forward to TRP.
Simultaneous Pushback	n/a
Remarks	Flight crew must not be authorised by the headset operator to start engines until pulled forward to the TRP due to jet blast. Alternative pushback onto empty opposite or adjacent stands is permitted, followed by a pull to the TRP. A dog-leg push may be required due to space constraints.

Stand 19 / 20		Max aircraft size B737-800(W) / A321
Standard Pushback Procedure	Push into cul-de-sac to face west, pull forward to TRP.	
Simultaneous Pushback	n/a	
Remarks	Main gear should not be pushed past the 'T' bar that crosses the centreline, to avoid entering the grass at the end of the cul-de-sac.	
Stand 21		Max aircraft size E190/195
Standard Pushback Procedure	Runway 27 – push onto taxiway Zulu to face east Runway 09 – push onto taxiway Zulu to face west	
Simultaneous Pushback	See Appendix B.	
Remarks	<p>Pushbacks for runway 09 in low visibility must avoid crossing Zulu 2 intermediate holding point. The push should remain aligned with the stand centreline until the tug is abeam the fuel farm entrance, at this point a dog-leg may be required.</p> <p>If runway 09 is in use and an aircraft is holding at Z2, the push will be held until the aircraft at Z2 has taxied clear.</p>	
Stand 22		Max aircraft size B737-800(W) / A320
Standard Pushback Procedure	Push into cul-de-sac to face east	
Simultaneous Pushback	See Appendix B.	
Remarks	<p>Non-standard pushbacks may be permitted if operations dictate:</p> <p>Runway 27 – push onto taxiway Zulu to face east Runway 09 – push onto taxiway Zulu to face west</p> <p>If an aircraft is parked on W7, aircraft on stand 22 must push onto taxiway Zulu.</p> <p>If an aircraft is parked on W8, aircraft on stand 22 shall not push.</p>	
Stand 23		Max aircraft size B737-800(W) / A321
Standard Pushback Procedure	Push into cul-de-sac to face east	
Simultaneous Pushback	See Appendix B.	
Remarks	<p>Non-standard pushbacks may be permitted if operations dictate:</p> <p>Runway 27 – push onto taxiway Zulu to face east Runway 09 – push onto taxiway Zulu to face west</p> <p>If an aircraft is parked on W7, aircraft on stand 23 must push onto taxiway Zulu.</p> <p>If an aircraft is parked on W8, aircraft on stand 23 shall not push.</p>	

Stand 24 / 25		Max aircraft size B737-800(W) / A321
Standard Pushback Procedure	Push into cul-de-sac to face west	
Simultaneous Pushback	See Appendix B.	
Remarks	<p>Non-standard pushbacks may be permitted if operations dictate:</p> <p>Runway 27 – push onto taxiway Zulu to face east Runway 09 – push onto taxiway Zulu to face west</p> <p>If an aircraft is parked on W8, aircraft on stand 25 must push onto taxiway Zulu.</p> <p>If an aircraft is parked on W7, aircraft on stand 25 shall not push.</p>	
Stand 26		Max aircraft size B787-9 / A330-300
Standard Pushback Procedure	Runway 27 – push onto taxiway Zulu to face east Runway 09 – push onto taxiway Zulu to face west	
Simultaneous Pushback	See Appendix B.	
Remarks	<p>Aircraft up to B757-200 may push into the cul-de-sac to face west, or push onto stand 28 if vacant, to be authorised and supervised by airside operations.</p> <p>Pushback into the cul-de-sac is not available with an aircraft parked on W7 or W8.</p>	
Stand 26S		Max aircraft size B737-800(W) / A320
Standard Pushback Procedure	Push back into the cul-de-sac to the TRP, facing west	
Simultaneous Pushback	n/a	
Remarks	<p>Stand 26S is unavailable if the aircraft parked on stand 26 is larger than a B757-200.</p> <p>Aircraft may self-manoeuvre through stand 28 if unoccupied.</p>	
Stand 28		Max aircraft size B737-800(W) / A321
Standard Pushback Procedure	Push-back into the cul-de-sac behind stand 28 to face south, pull forward to TRP	
Simultaneous Pushback	Not with stands 29 – 33L	
Remarks	<p>Aircraft may self-manoeuvre through stand 26S (if stand 26 is unoccupied or the aircraft on stand 26 is no larger than a B757-200 and there are no passenger movements, boarding or disembarking). The ground crew must contact airside operations for approval to self-manoeuvre if stand 26 is occupied.</p>	

Stand 29		Max aircraft size B757-200(W)
Standard Pushback Procedure	Push-back into the cul-de-sac to face south, pull forward to TRP	
Simultaneous Pushback	Not with stands 28-33L	
Remarks	n/a	

Stand 30		Max aircraft size B737-800(W) / A321
Standard Pushback Procedure	Push-back into the cul-de-sac to face south, pull forward to TRP	
Simultaneous Pushback	Not with stands 28-33L	
Remarks	<p>A dog-leg may be required due to space constraints.</p> <p>Ground crew may push-back onto an opposite or adjacent empty stand.</p> <p>A321 will need to push into a nearby empty stand (preferred) or directly onto the taxiway, to be agreed with the flight deck who will liaise with ATC.</p>	

Stand 31		Max aircraft size B737-800(W) / A321
Standard Pushback Procedure	Push-back into the cul-de-sac to face south, pull forward to TRP	
Simultaneous Pushback	Not with stands 28 – 33L	
Remarks	<p>Aircraft will normally self-manoeuve.</p> <p>Ground crew may push-back onto an opposite or adjacent empty stand.</p> <p>Larger aircraft may be pushed back directly onto the taxiway, to be agreed with the flight deck who will liaise with ATC.</p>	

Stand 31R		Max aircraft size E145
Standard Pushback Procedure	Push-back into the cul-de-sac to face south, pull forward to TRP	
Simultaneous Pushback	Not with stands 28 – 33L	
Remarks	<p>Aircraft may self-manoeuve with an airside operations follow-me.</p> <p>Ground crew may push-back onto an opposite or adjacent empty stand.</p>	

Stand 32		Max aircraft size B757-200(W)*
Standard Pushback Procedure	Push-back into the cul-de-sac to face south, pull forward to TRP	
Simultaneous Pushback	Not with stands 28 – 33L	

Remarks	Stand cannot be used for a B757-200(W) when the same type of aircraft is parked on adjacent stand 33.
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Stand 32R	Max aircraft size E145
Standard Pushback Procedure	Push-back into the cul-de-sac to face south, pull forward to TRP
Simultaneous Pushback	Not with stands 28 – 33L
Remarks	Aircraft may self-maneuvre with an airside operations follow-me.

Stand 32L	Max aircraft size E195
Standard Pushback Procedure	Push-back into the cul-de-sac to face south, pull forward to TRP
Simultaneous Pushback	Not with stands 28 – 33L
Remarks	n/a

Stand 33	Max aircraft size B757-200(W)
Standard Pushback Procedure	Push-back into the cul-de-sac to face south, pull forward to TRP
Simultaneous Pushback	Not with stands 31-36
Remarks	Aircraft will normally self-maneuvre. Stand cannot be used for a B757-200(W) when the same type of aircraft is parked on adjacent stand 33.

Stand 33L	Max aircraft size E195
Standard Pushback Procedure	Push-back into the cul-de-sac to face south, pull forward to TRP
Simultaneous Pushback	Not with stands 31-36
Remarks	Aircraft will normally self-maneuvre.

Stand 34	Max aircraft size A321
Standard Pushback Procedure	Push-back into the cul-de-sac to face south, pull forward to TRP
Simultaneous Pushback	Not with stands 31-36
Remarks	n/a

Stand 35	Max aircraft size B737-800(W)
Standard Pushback Procedure	Push-back into the cul-de-sac to face south, pull forward to TRP

Simultaneous Pushback	Not with stands 31-36
Remarks	If stand W1 is occupied, push direct onto taxiway Zulu

Stand 36	Max aircraft size E145
Standard Pushback Procedure	Push-back into the cul-de-sac to face south, pull forward to TRP
Simultaneous Pushback	Not with stands 31-35
Remarks	If stand W1 is occupied, push direct onto taxiway Zulu. A wingwalker is required when passing the aircraft at W1.

Stand 37	Max aircraft size B737-800(W) / A321
Standard Pushback Procedure	Runway 27 – push onto taxiway Zulu to face east Runway 09 – push onto taxiway Zulu to face west
Simultaneous Pushback	Not with stand 38
Remarks	No engines / APU running on stand from 2300 – 0700 All pre-start activity to be completed with FEGP only. APU operation only when operationally essential or for essential aircraft systems immediately prior to departure.

Stand 38	Max aircraft size B737-800(W) / A321
Standard Pushback Procedure	Runway 27 – push onto taxiway Zulu to face east Runway 09 – push onto taxiway Zulu to face west
Simultaneous Pushback	No
Remarks	No engines / APU running on stand from 2300 – 0700 All pre-start activity to be completed with FEGP only. APU operation only when operationally essential or for essential aircraft systems immediately prior to departure. No cross bleed or airstart permitted on stand.

Stand 39	Max aircraft size B737-800(W) / A321
Standard Pushback Procedure	Runway 27 – push onto taxiway Zulu to face east Runway 09 – push onto taxiway Zulu to face west
Simultaneous Pushback	Not with stand 38
Remarks	No engines / APU running on stand from 2300 – 0700 All pre-start activity to be completed with FEGP only. APU operation only when operationally essential or for essential aircraft systems immediately prior to departure. No cross bleed or airstart permitted on stand.

APPENDIX B SIMULTANEOUS PUSHBACK COMBINATIONS

		Stand 21	Stand 22		Stand 23		Stand 24		Stand 25		Stand 26	Stand 26S
		Twy Zulu	Twy Zulu	Cul-de-sac (east)	On Twy Zulu	Cul-de-sac (east)	Twy Zulu	Cul-de-sac (west)	Twy Zulu	Cul-de-sac (west)	Twy Zulu	Cul-de-sac (west)
Stand 21	Twy Zulu		✗	✓	✗	✓	✓	✓	✓	✓	✓	✓
Stand 22	Twy Zulu	✗			✗	✓	✗	✓	✓	✓	✓	✗
	Cul-de-sac	✗			✗	✗	✗	✗	✗	✗	✓	✗
Stand 23	Twy Zulu	✗	✗	✓			✗	✓	✗	✓	✓	✗
	Cul-de-sac	✓	✗	✗			✗	✗	✗	✗	✓	✗
Stand 24	Twy Zulu	✓	✗	✓	✗	✓			✗	✓	✗	✗
	Cul-de-sac	✓	✗	✗	✗	✗			✗	✗	✓	✗
Stand 25	Twy Zulu	✓	✓	✓	✗	✓	✗	✓			✗	✗
	Cul-de-sac	✓	✗	✗	✗	✗	✗	✗			✓	✗
Stand 26	Twy Zulu	✓	✓	✓	✓	✓	✗	✓	✗	✓		✗
Stand 26S	Cul-de-sac (west)	✓	✗	✗	✗	✗	✗	✗	✗	✗	✗	