



Item: 9

Development and Infrastructure Committee: 12 November 2024.

Inter-Island Air Services – Proposed Summer 2025 Timetable.

**Report by Corporate Director for Enterprise and Sustainable
Regeneration.**

1. Overview

- 1.1. The draft timetable in respect of air services to be operated during summer 2025 was presented to the Air Services Consultative Forum for consideration on 20 August 2024, with main comments and representations from transport representatives outlined in section 4 of this report.
- 1.2. The inter-island air services timetable for summer 2025 is scheduled to operate from 17 February to 25 October 2025 inclusive.
- 1.3. The proposed timetable, attached at Appendix 1 to this report, is consistent with that operated in previous years.
- 1.4. In advance of the Council's budget setting process for 2025/26 being established, the timetable in respect of inter-island air services, will be subject to an adequate service revenue budget being established.
- 1.5. Should an enhanced inter island air service be awarded from 1 April 2025, an enhanced timetable will be submitted to this Committee for consideration.

2. Recommendations

- 2.1. It is recommended that members of the Committee:
 - i. Approve the timetable in respect of inter-island air services, to be operated during summer 2025, attached as Appendix 1 to this report, subject to an adequate service revenue budget for 2025/26 being established.
 - ii. Note that, should an enhanced inter island air service be awarded from 1 April 2025, the Corporate Director for Enterprise and Sustainable Regeneration would submit, an amended timetable for consideration by the Development and Infrastructure Committee.

3. Background

- 3.1. The inter-island air service operates to the six Outer North Isles under a Public Service Obligation which establishes the minimum frequencies and capacity and sets the maximum fare levels provided to each of the isles.
- 3.2. In December 2020, the Inter-Island Air Services Public Service Obligation Contract 2021 to 2025 was awarded to Loganair Limited following a tendering exercise, with a commencement date of 1 April 2021.
- 3.3. The Inter-Island Air Services Public Service Obligation (PSO) Contract will go out to tender in Autumn 2024 with the new Contract due to commence on 1 April 2025.
- 3.4. The six Outer North Isles Community Councils each appoint a Transport Representative to represent their respective communities on the Inter-Isles Air Service Consultative Forum.

4. Air Services Forum

- 4.1. The draft timetable for summer 2025 was considered by the Air Services Consultative Forum on 20 August 2024, with the key issues discussed are outlined below.
- 4.2. There were no specific timetable changes requested by communities, noting that services are already operating to their maximum based on aircraft hours, with two aircraft operating over the winter period to maximise the timetable during daylight hours, reducing to a one aircraft operation over the summer timetable period in order to carry out maintenance works on both aircraft. Therefore, the proposed summer 2025 timetable presented to the Forum is consistent with that operated in previous years.
- 4.3. The issue of 'no shows' was raised at the forum, noting a significant increase from the previous year. It was felt that a high proportion of the 'no shows' were most likely open returns. Following discussions, a request was made for all Transport Representatives to take this back to their communities to ask that cancellations are made where possible.
- 4.4. It was noted that a reserve list would be advantageous due to the limited capacity available, particularly if there are cancellations. It was agreed that the current operator would take this back for further consideration. It was also agreed that this would be considered within the next Contract where possible.
- 4.5. A request was made by the Eday Head Teacher to make a booking for P7 pupils to attend their annual trip to Hoy. It was agreed that this would be considered on an annual basis subject to pupil numbers. A request was made for a separate

allocation of ad hoc flights for Eday in the future Contract given the limited frequency by air. This has been considered within the future Contract.

- 4.6. The accessibility issues were raised at the Forum, noting that separate meetings have been held with key stakeholders with a view to address this matter. Loganair have produced a report on Passengers with Reduced Mobility which is attached at Appendix 2 to this report. Discussions are also ongoing via the Regional Transport Partnership HITRANS on how to improve accessibility of the aircraft which also affects Argyll & Bute, Shetland and HIAL areas.
- 4.7. Loganair have outlined that the removal of a row of seats would improve access to and from the aircraft for people with restricted mobility however this would have a significant impact on the number of passengers carried. The removal of seats must also be carried out by an available engineer at Kirkwall and may need to be carried out at the hangar depending on weather conditions. It was therefore noted that this would be difficult to achieve with the current resources available whereby one aircraft is in operation over the summer timetable (February to October) and two aircraft are in operation over the winter months. Should the service be enhanced with a third aircraft, then it may be feasible. It was noted that an NHS charter with seats removed would be considered as part of the specification due to go out to tender where the charter costs would be met by NHS Orkney, similar to freight charters operated on behalf of Orkney Ferries Ltd. However, with the existing resource, the number of charters would be limited to five per annum.
- 4.8. It was noted that due to weight restrictions which were applied by the CAA, Loganair have been block booking a seat on the aircraft to ensure that they are not oversubscribed. Therefore, the capacity of the aircraft has been reduced to seven passengers instead of eight. Whilst it was understood that this should reduce the number of issues associated with weight, this has reduced capacity further. The need for a third aircraft was therefore emphasised and the need for a reserve list should the weight on some bookings not be an issue.
- 4.9. The Eday Community Council Representative emphasised that the community continue to request daily flights to the island instead of the limited service which exists at present. It was noted that this could be achieved with a third aircraft.
- 4.10. With no specific timetable requests, noting that the timetable is already operating to its maximum based on the aircraft hours available, there were no changes proposed to the draft timetable, attached at Appendix 1 to this report.

5. Air Services Contract

- 5.1. The proposed timetable for summer 2025 represents a continuation of the existing level of service, noting that the next Inter-Island Air Services PSO Contract, due to

commence on 1 April 2025, includes enhanced options as well as the existing level of service provision.

- 5.2. The enhanced options reflect the recommendations of the Orkney Inter Island Transport Study Strategic Business Case and would help to address the issues raised such as the reduced capacity due to CAA legislation, ongoing requests from communities and increased demands for an accessible transport solution and sustainable non-emergency care provision.
- 5.3. Following discussions at the Ferry Taskforce Group, a question was raised about using ferry funding as a means to provide enhanced air services which could provide more accessible services to people with restricted mobility in the Outer North Isles, noting that an immediate or short-term solution by ferry was not achievable.
- 5.4. The Inter Island Air Services Public Service Obligation (PSO) Contract went out to tender during September and October 2024 and is the subject of a separate report.

For Further Information please contact:

Laura Cromarty, Service Manager (Transportation), extension 2638, Email laura.cromarty@orkney.gov.uk

Implications of Report

1. Financial:

The proposed draft timetable for 2025 is consistent with that operated in previous years. However, the tender specification has also included an enhanced level of service for the Outer North Isles, which will be taken back to this Committee for consideration and approval subject to budget availability.

Increases in Aviation Gasoline and the uplift to contract rates resulted in considerable overspends against budget during financial year 2023/24 and 2024/25 which could not be absorbed by the service area.

Transportation Services notified an unavoidable service pressure in respect of the additional costs, in advance of the budget setting process for financial year 2024/25, and this request has been taken into consideration as part of the work to review the overall General Fund budget. The 2024/25 budget for the Inter-Island Air Services is £1,635,800.

In advance of a service budget being approved as part of the Council's annual budget setting process for 2025/26, the level of service provision detailed in this report is subject to an adequate budget being made available, and will require the submission of another unavoidable service pressure bid by Transportation Services.

2. Legal:

The Civil Aviation Act 1982 enables the Council to establish and maintain aerodromes.

On 21 December 2020, the Inter-Island Air Service Contract 2021 to 2025 was awarded to Loganair Limited with a commencement date of 1 April 2021.

The contract between the Council and the operator states that the operator shall carry out the services in accordance with the timetable agreed with the Council.

3. Corporate Governance:

In accordance with the Scheme of Administration, the determination of timetables in respect of inter-island air services is delegated to the Development and Infrastructure Committee.

4. Human Resources: None related to the report recommendations.

5. Equalities: The provision of a suitable inter-island air service is key in connecting some of our most remote fragile island communities.

6. Island Communities Impact: The timetable is specifically in relation to isles-based services which is a positive impact for all residents and helps to reduce the barriers that existing with access to services and goods.

7. Links to Council Plan: The proposals in this report support and contribute to improved outcomes for communities as outlined in the following Council Plan strategic priorities:

- Growing our economy.
- Strengthening our Communities.
- Developing our Infrastructure.
- Transforming our Council.

8. Links to Local Outcomes Improvement Plan: The proposals in this report support and contribute to improved outcomes for communities as outlined in the following Local Outcomes Improvement Plan priorities:

- Cost of Living.
- Sustainable Development.
- Local Equality.

9. Environmental and Climate Risk: None directly related to the recommendations in this report.

10. Risk: None directly related to the recommendations in this report.

11. Procurement: The inter-island air service is a Public Service Obligation Contract which is competitively tendered, prescribing the timetable to be undertaken by the operator.

12. Health and Safety: None directly related to the recommendations in this report.

13. Property and Assets: None directly related to the recommendations in this report.

14. Information Technology: None directly related to the recommendations in this report.

15. Cost of Living: It is noted that a high proportion of low-income families are resident in the outlying islands. The inter-island air service helps to connect communities and provide a key life line connection for some of our most remote island communities.

List of Background Papers

None

Appendices

Appendix 1 Inter-Island Air Services Draft Summer Timetable 2025

Appendix 2 Passengers with Reduced Mobility Report by Loganair

Summer 2025 - Inter-Island Air Services Timetable. Monday 17 February - Saturday 25 October 2025 inclusive



DRAFT

		Monday							Tuesday							Wednesday											
		LM	700	702	703	704	705	706	707	701	708	709	719	710	711	707	C	700	713	714	715	A	716	710	711	A	707
Kirkwall	dep	07:35	08:40	09:40	10:50	15:30	16:30	17:30	07:35	08:30	09:30	10:30	15:30	16:30	17:30	07:35	08:40	09:40	13:35	14:45	15:30	16:30	17:30	17:30	17:30		
Eday	arr																			14:55							17:40
Eday	dep																			15:02							17:47
Stronsay	arr									08:39							08:49										
Stronsay	dep									08:46							08:56										
Sanday	arr			09:53			16:43			08:51			15:43				09:01						15:43				
Sanday	dep			10:00			16:50			08:58			15:50				09:08						15:50				
Westray	arr		08:55									09:45						09:55									
Westray	dep		09:02									09:52						10:02									
Papa Westray	arr		09:04			15:45				09:54	10:45		16:45				10:04						16:45				
Papa Westray	dep		09:11			15:52				10:01	10:52		16:52				10:11						16:52				
Westray	arr					15:54							16:54										16:54				
Westray	dep					16:01							17:01										17:01				
North Ronaldsay	arr	07:52			11:07			17:47	07:52			11:02		17:47	07:52			13:52					17:47	17:57			
North Ronaldsay	dep	07:59			11:14			17:54	07:59			11:09		17:54	07:59			13:59					17:54	18:04			
Papa Westray	arr				11:24													14:09									
Papa Westray	dep				11:31													14:16									
Eday	arr	08:09													08:09												
Eday	dep	08:16													08:16												
Stronsay	arr			10:05			16:55					15:55										15:55					
Stronsay	dep			10:12			17:02					16:02										16:02					
Kirkwall	arr	08:26	09:26	10:21	11:46	16:16	17:11	18:11	08:16	09:11	10:16	11:26	16:11	17:16	18:11	08:26	09:21	10:26	14:31	15:12	16:11	17:16	18:11	18:21			

		Thursday							Friday							Saturday							Saturday Refit 2025 dates TBC (24/02/2024 - 16/03/2024)							Sunday		
		LM	701	708	709	717	710	711	707	701	713	714	719	710	711	707	720	721	722	723	724	722	723	724	725	726	727	725	726	727		
Kirkwall	dep	07:35	08:30	09:30	14:20	15:30	16:30	17:30	07:35	08:40	09:40	14:20	15:30	16:30	17:30	08:30	09:30	10:30	15:00	16:00	08:00	09:10	10:20	14:00	15:00	16:10	10:30	16:00	17:30			
Stronsay	arr		08:39							08:49		15:39				09:39									15:09							
Stronsay	dep		08:46							08:56		15:46				09:46									15:16							
Sanday	arr		08:51			15:43				09:01		15:51				09:51									15:21							
Sanday	dep		08:58			15:50				09:08		15:58				09:58									15:28							
Papa Westray	arr											14:35																10:45				
Papa Westray	dep											14:42																10:52				
North Ronaldsay	arr	07:52			14:37			17:47	07:52			14:52		17:47			10:47	15:17	16:17	08:17							11:02	17:47				
North Ronaldsay	dep	07:59			14:44			17:54	07:59			14:59		17:54			10:54	15:24	16:24	08:24							11:09	17:54				
Eday	arr								08:09											08:34							16:20					
Eday	dep								08:16											08:41							16:27					
North Ronaldsay	arr																										16:37					
North Ronaldsay	dep																										16:44					
Sanday	arr																						10:33					18:00				
Sanday	dep																						10:40					18:07				
Westray	arr			09:45								09:55				08:45						09:25										
Westray	dep			09:52								10:02				08:52						09:32										
Papa Westray	arr			09:54	14:54		16:45					10:04		16:45		08:54			16:34			09:34			14:15			16:15				
Papa Westray	dep			10:01	15:01		16:52					10:11		16:52		09:01			16:41			09:41			14:22			16:22				
Westray	arr						16:54						16:54												14:24			16:24				
Westray	dep						17:01						17:01												14:31			16:31				
Stronsay	arr					15:55																	10:45					18:12				
Stronsay	dep					16:02																	10:52					18:19				
Kirkwall	arr	08:16	09:11	10:16	15:16	16:11	17:16	18:11	08:26	09:21	10:26	15:16	16:11	17:16	18:11	09:16	10:11	11:11	15:41	16:56	08:51	09:56	11:01	14:46	15:41	17:01	11:26	16:46	18:28			

Eday: Monday AM drop during school term only. Bookings on the Eday drop will be subject to availability from 12:00 the Friday before departure until 18:00 on Sunday.

A: Operates school term only. Wednesdays 19 Feb - 2 April; 23 April - 2 July; and 20 August - 8 October 2025.

B: Operates during school holidays. Wednesdays 9 & 16 April; 9 July - 13 August and 15 & 22 October 2025. The first four seats are prioritised for Eday passengers up to 24 hours before flight.

C: The first four seats are prioritised for Eday passengers up to 24 hours before flight.

Eday: Friday AM - does **NOT** operate during June, July & August. The first four seats are prioritised for North Ronaldsay passengers up to 24 hours before flight.

Saturday Refit: Additional frequency by air provided while the Orkney Ferries ONI vessels are on winter refit.

Sunday: Flight drop off/pick up on request. Bookings can be made on the Sanday flight, shared with North Ronaldsay, from 12:00 on Friday until 12:00 on Sunday.

PLEASE NOTE - The operation of the Stronsay Sunday service is subject to availability of ground crew on the island. Currently (Aug 2024) there are NO crew available.

Report on the carriage of PRMs on the Orkney Inter-Isles service

Requested by Orkney Island Council and Mr Liam McArthur MSP



1. Introduction

At the request of Mr McArthur MSP and the Orkney Island council, a meeting was held on the 1st August 2024 to discuss the carriage of Passengers with Reduced Mobility (PRM) on the Orkney Inter-Isles air service (OAS). Present were representatives of NHS Orkney, Scottish Ambulance Service, Loganair and Orkney Islands Council. It was a consensus view that a notable number of Island residents were unable to access the OAS because they were unable to climb into or out of the aircraft, were not confident to travel alone or had medical conditions which meant that they were not accepted for carriage. A discussion followed about the potential carriage of islanders with medical conditions which required treatment in Kirkwall, but whose condition was deemed non-urgent and not to warrant an air-ambulance transfer, yet whose condition would preclude them from carriage under conventional airline or public transport protocols or on the OAS specifically.

It was agreed that the inability of these "PRMs" to access the OAS, Air Ambulance or, in some cases, ferry services was a serious issue for the health and wellbeing of the island communities. Loganair committed to review its current policies and to investigate and present back some options for how the OAS could be improved to become more accessible.

This report summarises the capabilities and limitations of the OAS, the regulations and guidance which govern the carriage of PRMs by Commercial Air Transport and sets out some options for improving the accessibility of the service with recommendations on next steps for consideration by the group.

2. Contents

1. Introduction.....	2
2. Contents.....	3
3. The Regulation of carriage of PRMs.....	4
4. Loganair PRM Policy for the Orkney Inter-Island Air Service.....	6
5. Defining the problem	8
6. Options to increase the range of PRMs carried on the OAS	9

3. The Regulation of carriage of PRMs

[ICAO document 9984](#) sets out the international definition of Passengers with Reduced Mobility (PRM) and provides guidance to the industry on providing access for them to Air Transport in compliance with the [Convention on the Rights of Persons with Disabilities](#). Commercial airlines and licensed airports in the U.K. are regulated by the U.K. Civil Aviation Authority (CAA) and the applicable law is set out in the [Air Navigation Order 2016](#) (SI 2016/765). The UK CAA also provides guidance to airports and airlines on supporting and enabling the travel of PRMs in compliance with the UK law, [The Civil Aviation \(Access to Air Travel for Disabled Persons and Persons with Reduced Mobility\) Regulations 2014](#) (SI 2014/2833). The EU legislation which was the foundation of the 2014 UK act is (EC) [No. 1107/2006](#) and key definitions in UK law are proscribed in EC 1107/2006. The SI 2014/2833 act also references key aspects of UK consumer law, specifically The Consumer Protection Regulations 2020 (SI 2020/484).

Loganair incorporates the legal requirements of these various laws, along with its obligations under its Air Operator Certificate (AOC) and general corporate and customer service policies into guidance provided to its staff and agents via its Ground Operations Manual.

The key definition of a PRM is set out in 1107/2006 (Article 2, a) and referenced by the UK SI 2014/2833:

‘disabled person’ or ‘person with reduced mobility’ means any person whose mobility when using transport is reduced due to any physical disability (sensory or locomotor, permanent or temporary), intellectual disability or impairment, or any other cause of disability, or age, and whose situation needs appropriate attention and the adaptation to his or her particular needs of the service made available to all passengers;

The [UK CAA expands](#) this definition further:

Special assistance is available to passengers who may need help to travel such as the elderly, those people with a physical disability, such as wheelchair users, and those who have difficulty with social interaction and communication, such as those with autism or dementia.

These broad definitions are assumed to cover all of the Orkney community affected by the limitations of the OAS and the use of the term “PRM” in this report, refers to these combined definitions.

The key parts of legislation relevant to the carriage of PRMs in the UK stems from 1107/2006 which are summarised as:

- Article 3: Airlines are generally not permitted to refuse to carry PRMs
- Article 4: Exceptions are permitted in two cases:
 - To comply with “applicable safety requirements “ in CAA or international law
 - If the size of the aircraft or its door makes embarkation or carriage physically impossible.
- Article 4: An airline may require a PRM to be accompanied by an assistant before accepting a booking.

The exception to carrying PRM’s based on “applicable safety requirements” is vague as in many areas, “safety requirements” are not proscriptively defined but determined by individual AOC holders based on the specific risks to their operations. Consequently, there may be significant differences between operators governed by the same legislation, as to whether a given PRM is accepted for travel or not. The relevant safety considerations which are incorporated into an AOC’s operating procedures stem from the basic and universal requirement to ensure that nothing endangers an aircraft or any person or property (SI 2016/765, 240, 241).

Other, non-regulatory factors also apply to the acceptance of passengers for public transport. Whilst recognizing the clear intent of the law is to avoid any form of discrimination against PRMs, operators need to consider the dignity of the PRM and the comfort and safety of other passengers. Passengers who are incontinent, infectious, known to be prone to vomiting or malodorous as examples would typically not be accepted on any public transport system out of consideration for other passengers and staff, whether they are otherwise categorised as PRMs or not.

These competing requirements: a range of generic non-discretionary legal obligations, some general operator specific safety driven procedures layered on top of some route/airport and aircraft specific safety limitations and finally some industry best practise, local commercial and consumer considerations are merged into a final, unique and operator specific policy and set of criteria for accepting PRMs.

Other items of note:

- The provision of assistance to PRMs under 1107/2006 and SI 2014/2833 obligates “**the managing body of the airport**” to provide assistance to the PRM from arrival at the airport, to their seat on the aircraft and vice versa on return (Article 7,8, Annex I)
- The PRM is required to give 48 hours’ notice to the airline/airport if requiring assistance.

The UK CAA provides further advice and information to passengers and airlines about the carriage of passengers with [medical conditions here](#). The CAA refer to a medical form used by the industry, the MEDIF which is used when passengers with complex or underlying health issues wish to travel. The form is completed by the passenger's GP and returned to the airline for assessment. The risks posed by air travel will vary based on the journey and aircraft type. Long Haul flying at high altitudes will expose the passenger to cabin altitudes between 6,000 and 8,000 ft which may require providing the passenger supplementary oxygen supply. Long Haul flights can also take place where no suitable diversion point exists for up to 3 hours flying time, meaning that serious medical emergencies must be dealt with on board. Generally, these factors do not affect the OAS, where the aircraft typically fly below 1,000 ft and journey times are very short although diversions to Wick for example, could happen at higher altitudes. GPs can occasionally inappropriately direct patients to our flights with conditions that could become serious – fast atrial fibrillation as a recent example. The key consideration for the OAS is accessibility to and from the aircraft under both normal and emergency situations.

4. Loganair PRM Policy for the OAS

Loganair is extremely proud to have operated the OAS continuously for almost 60 years. During this period, the ability of PRMs to access this service has not fundamentally changed, as the primary constraint on the carriage of PRMs is the aircraft cabin, which itself has not changed in this period. The aircraft currently in use, the BN-2 Islander is still the only aircraft type in production and capable of meeting the operational and commercial requirements of the OAS. However, this aircraft has one of the smallest cabins and smallest passenger access doors of any commercial airliner in service in the UK. There are no integral airstairs and passengers are provided low height portable stool by the ground crew, to aid them in stepping up into the cabin. The aircraft sits relatively low to the ground and is of a size such that conventional aircraft steps, hi-lifts and Aviramps are not compatible. The unique lack of a central aisle in the cabin means that manual lifting of passengers is limited to only providing assistance to passengers from the ground. The last resort solution of physically carrying an immobile passenger up the aircraft steps and to their seat is not possible on the BN-2. Therefore, access to the aircraft poses a significant barrier to many categories of PRM. IATA classifications of PRM are shown in table 1.

Table 1

Category	Meaning
WCHS	The Passenger cannot climb stairs but can walk short distances.
WCHR	The Passenger only needs a wheelchair to cover longer distances: climbing stairs is possible independently.
WCHC	The Passenger always needs a wheelchair, cannot move around the cabin without assistance – a separate wheelchair is to be carried for cabin use.

Onboard the aircraft the lack of a central aisle means that each row of two passengers must be able to open their own door and exit the aircraft unaided in the event of an emergency. It will be noted that on conventional airline flights, there are restrictions on who may sit in the emergency exit rows – in effect these restrictions apply to every row on the BN-2 aircraft. Further, the OAS operates with a single pilot. Therefore, and unlike on any conventional air-service, there is not a second crew member able to assist the passengers in the event of a mid-flight medical emergency. This factor significantly limits the type of medical conditions which are practical and appropriate to carry on-board the OAS.

Loganair's policy (GOM 3.5.5) and conditions of carriage states that passengers may be denied boarding if

- Their carriage might threaten the safety of the aircraft or the health and safety of any person on the aircraft.
- Carriage of that person or their baggage could affect the comfort of any person on the aircraft
- The passenger is drunk or under the influence of drugs
- The passenger's mental or physical state is a danger or risk to the passenger, the aircraft or any person carried on it.

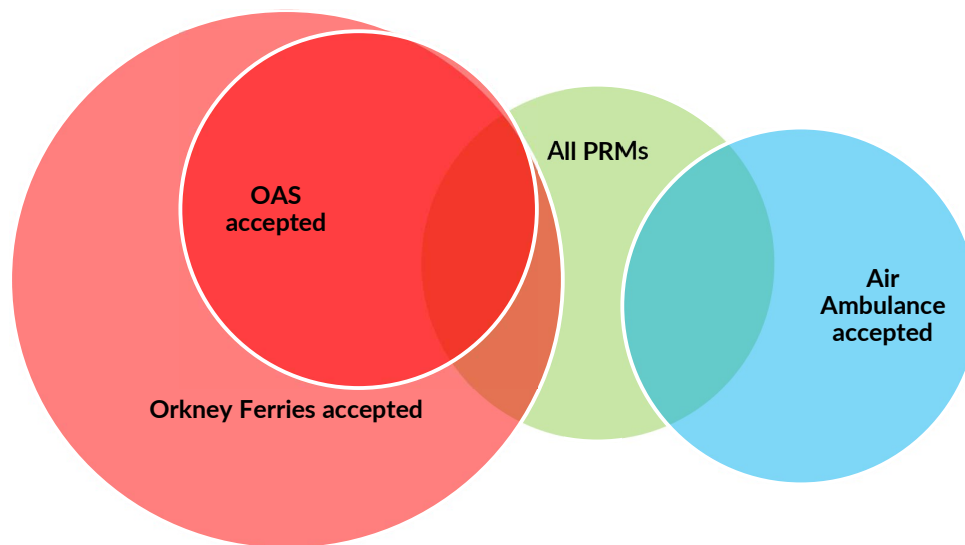
In all cases and on all flights, the Captain's decision as to whether a given passenger or PRM can be carried safely is final.

All staff involved in the OAS, both Loganair and OIC employed airport crews recognise the unique nature of the Island's transport links and the limitations these place on the provision of health care and ambulance services away from the mainland. Within the legal and policy constraints, staff are authorised by Loganair to exercise discretion and common sense in trying to reconcile the needs of passengers with the imperative to operate safely.

5. Defining the problem

Whilst the OAS is fundamentally limited in the range of PRMs that can be carried, it is also clear that there is a significant and often vulnerable group of Orcadians and visitors who are currently “falling between the cracks” of the combined transport service provision (OAS, Air Ambulance, Ferry and Road).

Figure 1



To address this need, it is suggested that a working group of stakeholders are tasked with defining the physical group of PRMs who fall into the central green circle but not the others, being unable or unwilling to use the OAS but not considered medically urgent enough to warrant the significant costs of deploying the rotary air-ambulance.

RECOMMENDATION 1 – Form a working group with representatives from NHS Orkney, Orkney Islands Council, Patient and islands representatives along with Loganair, Orkney Ferries and Scottish Ambulance service with the objective of defining and categorising the range of PRMs currently unable to access the non-emergency inter-island transport options.

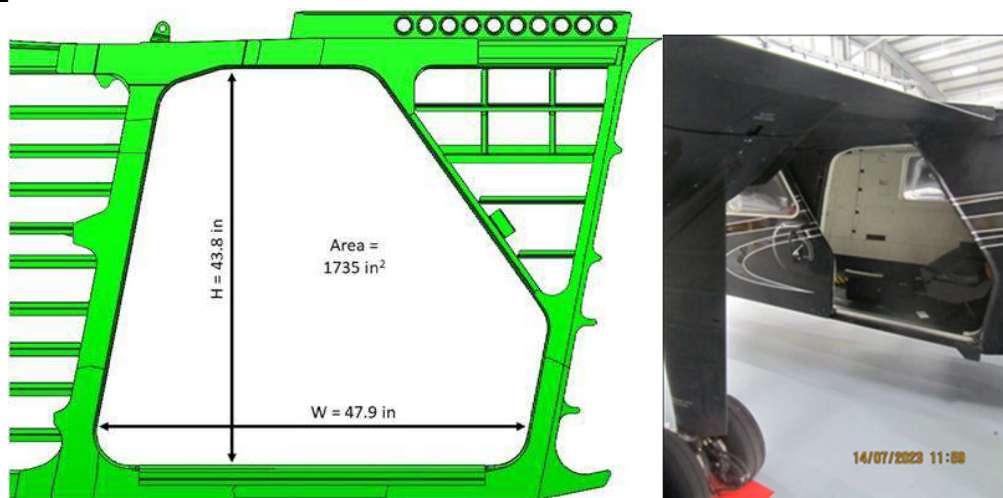
6. Options to increase the range of PRMs carried on the OAS

Physical Access

Since 2020, Loganair have been an active partner on Project HEART a UKRI supported research project assessing the future, low carbon options for OAS type travel. The project's scope covers aircraft and terminal design, inter-modal connectivity and was also tasked by Loganair to develop solutions to improve the accessibility of the service to PRMs. Whilst the focus has been on new aircraft designs, Britten Norman (BN), the manufacturer of the BN-2 are a partner and shared some of their design work on improving access to the BN-2. Edinburgh Napier university are also a partner on the project and are contracted to assess and define, through a series of workshops with wheelchair users and other PRMs, the design requirements for any future such system.

BN's initial task was to increase the size of the doorway to enable better access for passengers, with the objective of providing access to a passenger in the WCHC category, that is a passenger who cannot walk or climb stairs without assistance. The most accessible door is that to row 5, the rearmost door as this is positioned to the rear of the wing, allowing slightly easier access. The current dimensions of the door to row 5 are shown below.

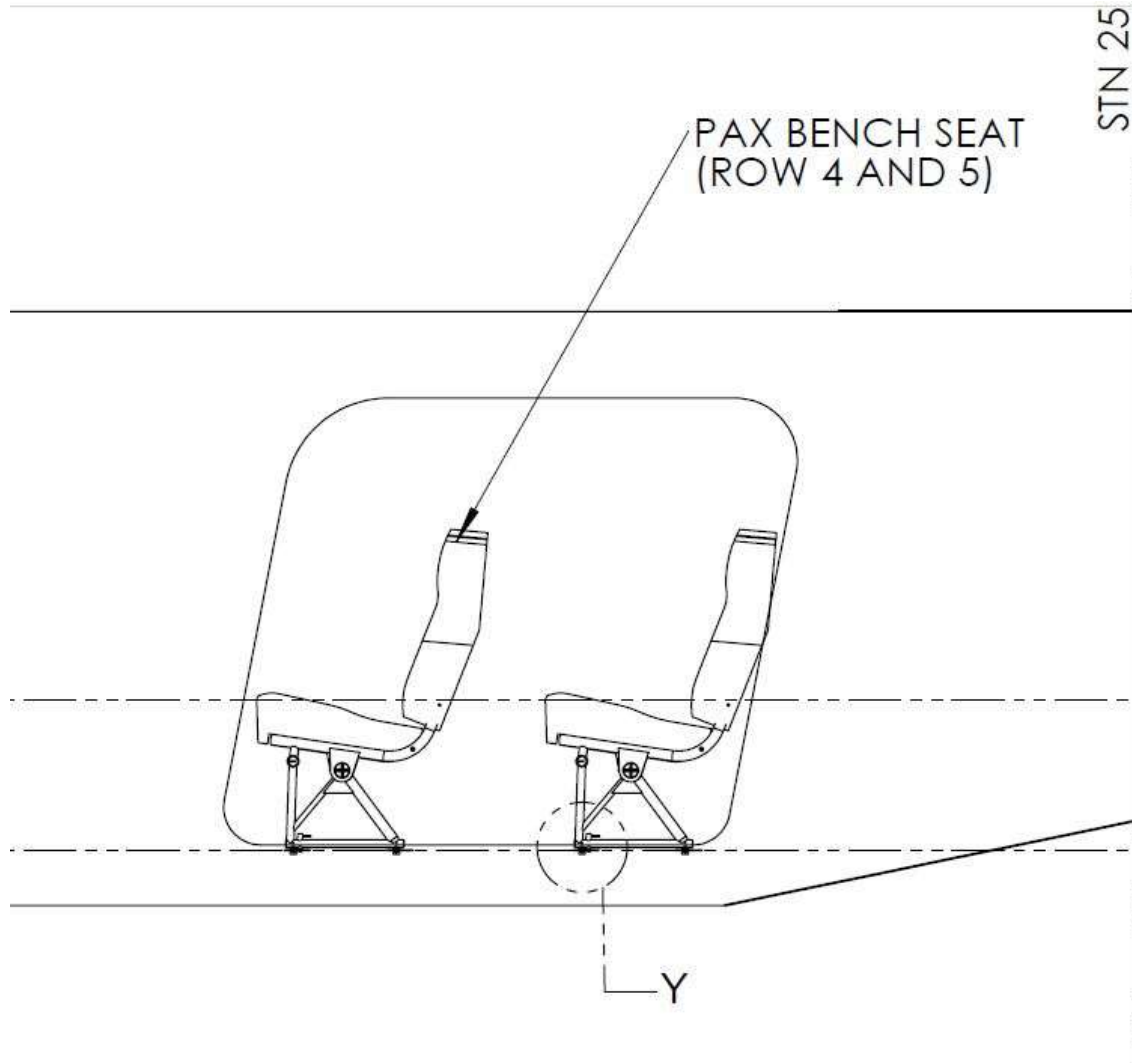
Figure 2



BN have conducted preliminary design work to increase the size of the door. Due to structural limitations, the basic dimensions of the door cannot be realistically changed, but

BN believe that it is possible and practical to remove the structure which impinges on the top righthand side of the door, increasing the overall area. BN's preliminary design drawings are shown in Appendix A, but a summary is shown below.

Figure 3



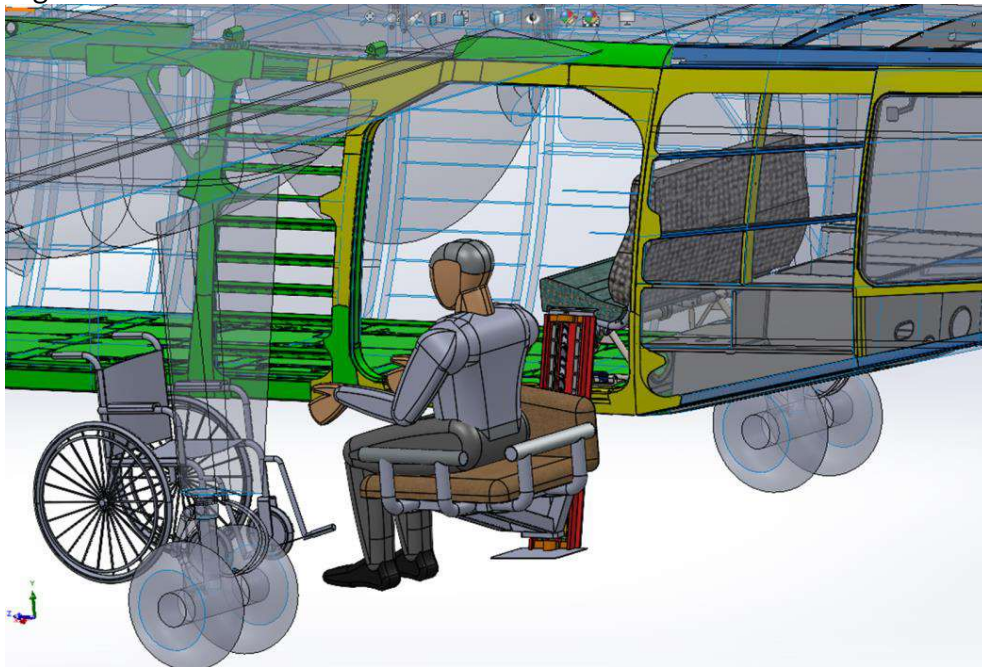
VIEW LOOKING INBOARD ON AIRCRAFT PORT SIDE
(SHOWING ROW 4 AND 5 SEAT POSITIONS)
SCALE 1:20

Modifying the door in this manner will require BN to develop and receive approval for a Supplemental Type Certificate (STC) which will then enable operators to modify their aircraft accordingly. It is likely that the STC will only apply to certain aircraft in the fleet, given their age, original build specifications and modification status. BN have indicated however, that they expect this STC to apply to the majority of the in-service fleet.

Increasing the area of the door allows the potential use of a ground aid to lift wheelchair passengers up to a heigh level with the seats in the aircraft and permitting them to slide sideways onto the aircraft's seats. Currently the door shape does not allow this without the passenger contorting themselves to avoid hitting their head and shoulders on the door frame.

Edinburgh Napier University (ENU) have conducted detailed design studies into how this might work in practise and a sample concept is shown here.

Figure 4



Significant further work is required to develop the concept. Currently it is assumed that a lifting device which is not permanently attached to the aircraft is preferred as this potentially avoids the need for aviation certification which would add time and financial costs. A system which is light and compact enough to travel with the aircraft is also highly desirable to avoid the need for multiple devices to be pre-positioned at every airport around the network and to provide greater autonomy for the passenger and crew in the event pre-positioned equipment is unavailable or unserviceable. Design work on this aspect continues and ENU have indicated that they would be happy to brief the Orkney stakeholders on their work and

also incorporate feedback on any Orcadian specific use cases or PRM cases into their design studies.

In parallel to this work, Loganair is considering placing orders for the [Mobilift TX](#), a hand powered wheelchair lift for use with the DHC-6 fleet at Glasgow and the Western Isles. This is one of the smallest, commercially available wheelchair lifts available but initial assessments are that it may not be compatible with the BN2B. However, Loganair will conduct a formal assessment, and if necessary a trial to determine whether this lift could provide a solution for lifting PRMs up to the height of the aircraft cabin.

Figure 5



RECOMMENDATION 2 – Loganair to formally invite Britten Norman and Edinburgh Napier University to present their proposed accessibility solutions for the BN2 aircraft to the working group for consideration. Further, Loganair to assess and trial, if appropriate, the Mobilift TX system with the BN2 for potential deployment on the OAS.

Seat Pitch

PRMs typically require additional seat pitch to account for their limited mobility. Passengers with full leg casts for example typically require larger pitch seating and often two or even three seats in order to position themselves (relatively) comfortably. Certain wheelchair passengers, even when lifted to the height of the aircraft cabin, may require assistance and additional space to move sideways into the aircraft, and additional seat pitch would improve the experience for the PRMs and increase the range of PRMs who could be accommodated.

Loganair have developed a procedure, with BN's approval, to remove the 4th row of seats from the BN2B which permits significantly greater leg room for the passengers seated in row 5 (see Fig 3 and 4). In combination with the larger door for this row and a suitable lifting device which can raise a seated passenger to the height to the aircraft seats, a notably larger range of PRMs would be able to access the aircraft and therefore potentially be carried.

Carriage of Assistants

Subject to a risk assessment, the carriage of an assistant able to provide physical aid to the PRM may increase the range of PRMs who could be carried by mitigating risks around comprehension and physical limitation on evacuations in an emergency. However, without also improving the access to the aircraft (via seat pitch and lifting), PRMs would still be required to physically enter and exit the aircraft with only basic support from ground level. This level of entry/exit assistance is already available and provided by the ground crew but the carriage of an assistant might also overcome some of the non-physical barriers and hesitancy or reluctance certain groups of passengers face in using the OAS or Ferry services.

In extremis, the carriage of suitably qualified medical professional may be an effective mitigation to restrictions on carrying certain PRMs such as those with minor or serious injuries by enabling the provision of necessary medical care in the event that is required during the journey. However, questions about the appropriateness of carrying this group of PRMs on public transport generally would remain.

Re-Roling the existing BN2B Fleet

Removing the row 4 seats is a physical change to the aircraft which requires a B1 licensed aircraft engineer to oversee and certify in order for the aircraft to remain airworthy. Whilst this work is relatively straightforward, only one B1 engineer is normally on-duty and they are tasked with overseeing the scheduled maintenance work being performed on the fleet. The work may need to be undertaken in the hangar at Kirkwall and the aircraft taxied to and from the ramp for this work to be performed. Subject to the number of requests per month, it is envisaged that this work could be accommodated within the existing resources. In order for the work to be undertaken it is reasonable to assume that a total of one hour is required in order to remove and replace the seats. This accounts for the time required to move the

aircraft to the hangar, the work to be undertaken, checked and approved and the aircraft repositioned to the Kirkwall ramp. Ideally 24h notice would be required to ensure resource availability although the team would of course make best efforts to accommodate urgent requests.

However, removing the row 4 seats alone, without also increasing the size of the door and also providing a lifting aid for PRMs is unlikely to significantly increase the range of PRMs carried by the OAS (Fig 1).

If the door is modified and a suitable lifting aid procured, other factors are likely to unfortunately limit the availability of the OAS as currently configured. The current fleet of two aircraft are heavily tasked, particularly during winter, where the short daylight hours compress the amount of flying into a smaller window and both aircraft are scheduled to fly intensively. Whilst there is usually a suitable mid-morning to early afternoon interval to accommodate an extra flight, there is very little spare capacity due to the aircrafts' requirement for heavy maintenance every 300 hours. During the Summer months, the 300 hour maintenance schedule allows for some more spare capacity which could be utilised for additional flying. It is estimated that there are approximately 35 additional flying hours possible on the fleet during this period (which could be used for operating re-configured PRM flights). However, for the coming summer period (2025), most of this time is planned to be used for the training of new and existing pilots with subsequent years also utilising an amount for recurrent training. It is therefore expected that any significant use of this capacity (removal of row4) will have an impact on the schedule and capacity of the OAS.

The general perception of the OAS team and Orcadian island residents is that the current service is capacity constrained. During the Summer months, the increased air temperatures and resulting decrease in air density has a negative impact on the number of passengers who can be carried, often reducing the available number of seats from 8 to 7 and impacting the carriage of baggage, freight and mail. The loss of further capacity, by reducing the seat count to 6, or removing flights from the schedule to accommodate cabin reconfiguration is undesirable.

Dedicated PRM Service

An option to be considered by the group is the addition of an aircraft dedicated as a non-urgent ambulance. Conceptually, this would be another BN2B Islander, common to the existing fleet and therefore operated, maintained and handled in the same way as the existing fleet. However, the aircraft would be modified with the larger cabin door and equipped with the proposed lifting device. The aircraft would have the Row 4 seats permanently removed and would ideally be staffed not just with a pilot, but with a travelling assistant, potentially with appropriate medical qualifications. This aircraft could provide additional capacity to greatly expand and bolster the existing OAS and provide back up capacity in the event of unscheduled maintenance on the fleet but also able to be called out

as needed to move PRMs from the Islands to Kirkwall. Obvious limitations would still apply – the airfields are only accessible during daylight hours and would, most likely, still be required to be licensed with Rescue and Firefighting Service in attendance . However, this capability, especially when operated as a dedicated flight (without carrying passengers other than the PRM and Assistant) would enable the broadest possible range of PRMs to be carried.

Although in most cases this aircraft could also carry other passengers, in the event that a dedicated flight for a PRM was deemed necessary, the costs per flight of a BN2B (at several hundreds of pounds) is orders of magnitude less than the costs for calling out the Air Ambulance helicopter from Inverness (costs of tens of thousands of pounds).

The challenges faced by the Orkney communities who rely on the BN2B for their lifeline connections will be identical to those faced by the Shetland and Western Isle communities who also require the BN2B with its limitations. There is the potential to defray the costs of an additional aircraft by utilizing this capability across the Highlands and Islands of Scotland as a supporting asset for the Air Ambulance and reducing the use of SAAS or Coastguard helicopters for non-urgent patient transfers in the region.

RECOMMENDATION 3 – Loganair to assess the feasibility, timescales, acquisition and operating costs of providing an additional, dedicated PRM Islander aircraft to support Orkney, Shetland and the Hebrides and present the results for consideration by the group.