

Frontier Scientific Solutions

Temperature-Controlled Air Corridor

Scheduled Trans-Atlantic
Service

AIR CARGO GUIDELINE

April 2026

Flight Schedule & Capacity

Booking Process

Terms & Conditions of Carriage – Summary

Appendix 1: Cargo Insurance – Proof of Coverage



Weekly Flight Schedule & Capacity

ILM > SNN > ILM

Temperature-Controlled Corridor - Scheduled Service

Scheduling overview for the Wilmington International (ILM) to Shannon (SNN) temperature-controlled corridor, effective 31st October 2025.

This rotational scheduled service provides essential transatlantic connectivity between North Carolina's Port City and Ireland's premier western gateway for patient critical, life sciences materials.

ILM-SNN-ILM

Scheduled Service Details



ILM > SNN

Flight: ATN163

Days: Monday, Wednesday, Friday

Departure: 08:00 local

Arrival: 20:00 local



SNN > ILM

Flight: ATN164

Days: Tuesday, Thursday, Saturday

Departure: 14:00 local

Arrival: 17:15 local

Flights operated by a subsidiary airline of ATSG on behalf of Frontier Scientific Solutions.

Operational Specifications

Capacity Metrics

ILM-SNN MTOW: 44,360 kg

SNN-ILM MTOW: 52,730 kg

Critical Deadlines

Booking Cut-off: 24 hours prior to scheduled departure time

Tendering Cut-off: 8 hours prior to scheduled departure time

Delivery Address for Cargo

Wilmington (ILM):

- Frontier Scientific Solutions, 805 N 23rd Street, Wilmington, NC, 28405, United States
- Modern Aviation, 1817 Aviation Drive, Wilmington International Airport, NC 28405, United States

Shannon (SNN):

- Frontier Scientific Solutions, Block S, Shannon Free Zone, Shannon, Co. Clare, Ireland, V14 V668
- Swissport, Cargo Terminal 2, Shannon Airport, Co. Clare, Ireland V14 EE06

Air Cargo Booking Process

Welcome to the Frontier Scientific Solutions air cargo booking system. Our comprehensive process ensures your shipments receive expert handling from booking through delivery.

Whether you're shipping ambient cargo, temperature-controlled pharmaceuticals, high-value cargo, or dangerous goods, our structured approach guarantees accuracy, compliance, and on-time performance for every shipment.

Getting Started: How to Book

Contact Information

All air cargo bookings begin with a simple email to our dedicated Client Services team at bookings@fs2.com or online via www.fs2.com/booking-form-request. Our logistics coordinators are standing by to process your request promptly.

Required: Use our structured Excel template to provide all necessary booking details. This standardized format ensures nothing is overlooked and accelerates processing time.

Our booking template is designed to capture every critical detail in one single document. This helps reduce back-and-forth communication and getting your cargo moving faster. Of course, if needed one of our client services team are available to take your call to help further expedite your query

Essential Information Required

Customer Details

- Shipper name and complete address
- Consignee name and complete address
- Bill-to-party name and complete address

Accurate contact information ensures smooth coordination and proper invoicing throughout the shipping process.

Customs Brokerage

Specify your appointed customs broker for destination clearance. If you don't have an established broker relationship, FS2 Global can provide professional customs brokerage services to facilitate seamless clearance.

Detailed Shipment Specifications

Comprehensive shipment information is critical for proper handling, routing, and compliance. The following details must be provided for every booking:

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1. Product Information

- Complete product name and description
- Cargo classification: General Cargo, Dangerous Goods (DG), or Temperature-Controlled
- Required shipping temperature (for temp-controlled cargo)

2. Package Details

- Total quantity of packages or pallets
- Dimensions in centimeters (Length × Width × Height) per unit
- Actual weight per package or pallet

3. Commercial Information

- Declared value and currency
- Additional insurance requirements (if required)
- Incoterms (International Commercial Terms)
- HS Code (Harmonized System classification)

4. Compliance & Instructions

- Known Consignor or US Security Screening status confirmation
- Special handling instructions
- Any regulatory or security requirements

Temperature Control & Documentation

Temperature Control Units

Customer-Provided Units:

- Specify unit type and model
- Dry ice quantity and replenishment schedule
- Number of data loggers being shipped

FS2-Provided Units: (only available in 2026)

- Select appropriate unit type for your cargo
- Arrange dry ice supply and monitoring
- Request data logger quantity

Required Documentation

- Commercial Invoice (customer-provided)
- Packing List (if applicable)
- Air Waybill (created by FS2)
- Electronic Export Information (EEI - if applicable)
- Consignment Security Declaration (CSD)
- Consolidation Manifest (if applicable)
- Established Business Relationship Letter (US-bound shipments)
- Customs Single Administration Document (SAD) (via customs broker)
- Dangerous Goods Declaration with MSDS (if applicable)
- EU Import Customs Declaration (at destination)

Complete documentation is essential for regulatory compliance and timely clearance. Our team reviews all documents to ensure accuracy before shipment departure, preventing costly delays at customs checkpoints.

FS2 Global Solutions Terms and Conditions of Carriage

These comprehensive terms govern all cargo transportation services provided by FS2 Global Solutions.*

Understanding these conditions ensures smooth, compliant shipping operations and clarifies the responsibilities of all parties involved in the carriage of goods.

Please refer to the official document provided for detailed terms & conditions.

Key Definitions and Scope

Cargo & Carriage

Cargo includes anything transported by aircraft or other means, excluding passenger baggage. Carriage encompasses all transportation services, whether gratuitous or for reward, governed by applicable international conventions.

Parties Involved

The Shipper contracts with the Carrier for transportation. The Consignee receives the shipment at destination. Agents act on behalf of the Carrier with expressed or implied authority.

Documentation

Air Waybills or Shipment Records evidence the contract of carriage. These documents contain essential shipping information and establish the terms governing the transportation.

These terms apply to all carriage performed by or on behalf of FS2, subject to applicable international conventions including the Warsaw Convention and Montreal Convention of 1999. Where international carriage is involved, convention provisions take precedence over conflicting terms.

Cargo Acceptance Requirements

Acceptable Cargo

The Carrier may transport shipments subject to equipment and space availability, provided:

- Transportation is not prohibited by laws of countries involved
- Cargo is properly packed and ready for carriage
- Required shipping documents accompany the shipment
- Goods won't endanger aircraft, persons, or property

The Carrier reserves the right to refuse carriage when circumstances require and may reject shipments exceeding specified declared value limits.

Shipper Responsibilities

Shippers must ensure appropriate packaging to protect cargo during transport and prevent injury or damage. Each package requires legible, durable marking showing:

- Air Waybill number
- Shipper and Consignee identification
- Special handling instructions when applicable

Special cargo including high-value, hazardous, dangerous, or fragile goods requires compliance with specific Carrier regulations. Hazardous materials must be marked according to applicable laws.

Documentation and Compliance

1. Air Waybill Preparation

The Shipper must complete an Air Waybill in the prescribed form and number of copies, delivered simultaneously with cargo acceptance. The Carrier may prepare documentation on behalf of the Shipper when requested.

2. Accuracy Requirements

The Shipper bears full liability for correctness of all particulars and statements in shipping documents. Any damage, claims, or costs resulting from incorrect, inaccurate, or incomplete information are the Shipper's responsibility.

3. Government Compliance

Shippers must comply with all applicable laws, customs, and government regulations of every jurisdiction involved. This includes obtaining necessary licenses, approvals, and ensuring compliance with sanctions and embargo restrictions.

4. Restricted Destinations

Shippers must not consign shipments to persons or entities on EU Consolidated Lists, US Consolidated Lists including OFAC's Specially Designated Nationals List, or other debarred party lists. Special acceptance processes apply for weapons, military equipment, semiconductors, and dual-use goods.

Rates, Charges, and Payment Terms

Applicable Rates

Rates and charges are those published and distributed by the Carrier, effective on the contract conclusion date unless otherwise agreed in writing. Charges are based on the higher of total weight or volume, plus applicable surcharges.

Additional Services

Published rates cover airport-to-airport service only. Additional charges apply for pick-up, delivery, storage, insurance, cash on delivery, customs clearing, packaging repairs, and alternative transportation methods.

Payment Requirements

All charges are fully earned upon cargo receipt by the Carrier, regardless of loss, damage, or non-arrival. Invoices are payable within 30 calendar days from issuance. Late payments incur 0.5% monthly interest or the maximum legal rate, whichever is less.

The Shipper guarantees payment of freight rates, storage charges, and all unpaid amounts including charges collect, advances, and disbursements. Disputed invoices must be notified in writing within 30 days; otherwise, they are deemed correct and irrevocably accepted.

The Carrier maintains a lien on cargo for unpaid charges and may dispose of goods at public or private sale after providing notice.

Liability Limitations and Claims

Carrier Liability Framework

The Carrier is liable for damage sustained during carriage only if the occurrence causing damage took place during transportation as defined in these terms. Liability is limited to amounts stipulated in applicable conventions, notwithstanding gross negligence or willful misconduct.

Maximum liability: 26 Special Drawing Rights per kilogram of cargo destroyed, lost, damaged, or delayed, unless a higher declared value is agreed and paid for.

The Carrier is not liable for:

- Loss of opportunity, anticipated savings, or lost profits
- Loss of business, revenues, or business reputation
- Indirect, incidental, special, punitive, or consequential losses
- Damage from inherent defects, quality, or vice of cargo
- Damage resulting from Shipper's negligent acts or omissions

Claims Process

Receipt without complaint is prima facie evidence of proper delivery. Written complaints must be made:

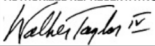
- **Visible damage:** Within 14 days of receipt
- **Other damage:** Within 14 days of receipt
- **Delay:** Within 21 days of delivery
- **Non-delivery:** Within 120 days of expected arrival

Actions must be brought within 2 years from the date of arrival, expected arrival, or when transportation stopped.

* FS2 Global Solutions is a wholly owned subsidiary of Frontier Scientific Solutions

FS2 Global Solutions Cargo Insurance Certificate

FS2 Global Solutions maintains worldwide cargo insurance coverage up to \$10m per event and per aggregate. This insurance covers all modes of transport. Other Proof of Coverage certificates are available upon demand. Where client specific contracts are in place, named insured certificates can be provided.

ACORD®		CERTIFICATE OF LIABILITY INSURANCE		DATE (MM/DD/YYYY) 10/13/2025			
THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.							
IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).							
PRODUCER Arthur J. Gallagher Risk Management Services, LLC 4250 Congress St Ste 200 Charlotte NC 28209			CONTACT NAME: PHONE (A/C, No, Ext): 910-509-9000 FAX (A/C, No): 910-509-9006 E-MAIL: ADDRESS:				
INSURED Frontier Scientific Solutions, LLC; Frontier Scientific Solutions Europe Limited; FS2 Global Solutions, LLC; and FS2 Global Solution Europe Limited 1919 S. Post Rd Indianapolis IN 46239			INSURER(S) AFFORDING COVERAGE INSURER A : AXA XL Insurance Company UK Limited INSURER B : INSURER C : INSURER D : INSURER E : INSURER F :				
COVERAGES		CERTIFICATE NUMBER: 873076451		REVISION NUMBER:			
THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.							
INSR	LTR	TYPE OF INSURANCE	ADDL SUBR	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
		COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input type="checkbox"/> OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC OTHER:					EACH OCCURRENCE \$ DAMAGE TO RENTED PREMISES (Ea occurrence) \$ MED EXP (Any one person) \$ PERSONAL & ADV INJURY \$ GENERAL AGGREGATE \$ PRODUCTS - COMPI/OP AGG \$
		AUTOMOBILE LIABILITY <input type="checkbox"/> ANY AUTO <input type="checkbox"/> OWNED <input type="checkbox"/> SCHEDULED <input type="checkbox"/> AUTOS ONLY <input type="checkbox"/> AUTOS <input type="checkbox"/> HIRED <input type="checkbox"/> NON-OWNED <input type="checkbox"/> AUTOS ONLY <input type="checkbox"/> AUTOS ONLY					COMBINED SINGLE LIMIT (Ea accident) \$ BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$
		UMBRELLA LIAB <input type="checkbox"/> OCCUR EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE DED <input type="checkbox"/> RETENTION \$					EACH OCCURRENCE \$ AGGREGATE \$
		WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	Y/N	N/A			PER STATUTE <input type="checkbox"/> OTH-ER <input type="checkbox"/> E.L. EACH ACCIDENT \$ E.L. DISEASE - EA EMPLOYEE \$ E.L. DISEASE - POLICY LIMIT \$
A		Cargo Liability		B1000P085032025	10/15/2025	9/30/2026	Any one Vessel Any one Aircraft Anyone Land Conveyan. \$10,000,000
DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required) Coverage: Products Liability Policy Number: D03322075 Carrier : Chubb Indemnity Insurance Company Effective Date: 9/30/2025 Expiration Date: 9/30/2026 Limits: \$10,000,000 occurrence, \$10,000,000 aggregate and \$50,000 each event deductible/ \$250,000 aggregate deductible.							
CERTIFICATE HOLDER				CANCELLATION			
Proof of Coverage				SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.			
				AUTHORIZED REPRESENTATIVE 			

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