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TRUSTED TRANSPORT. PROVEN PARTNERSHIP.

Secured Transportation Services — a subsidiary of NANO
Nuclear Energy — nuclear logistics, transportation, and more.

Over 20 Years in the Field • 40+ Countries • Nearly Every Active NRC-Approved
SNF Route

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OVER 20 YEARS IN THE FIELD

Serving the Research Reactor Community Since 2005

STS has spent more than two decades moving spent and fresh fuel for research reactors — built on the INL University Fuel Services Program (in place since 1977) and DOE's Foreign Research Reactor Return Program (since 1996, 40+ countries). Recent University Fuel Program movements include MIT, MURR, and Penn State.

CASE STUDY — UNIVERSITY OF MISSOURI RESEARCH REACTOR

24

Spent fuel elements shipped per year

8

Elements per BRR cask load

3

Shipments per year, MURR to SRS

- Cask-load logistics assessments and pre-job planning support
- Transport logistics management — escort coordination, Transportation & Security Plan development, and state/federal notifications
- Shipment tracking from MURR to the Savannah River Site, CVSA inspections, and delivery confirmation



STS field crews on-site handling BRR cask— one of dozens of moves like this across 20+ years.

This is the same institutional muscle memory — trusted routes, established relationships, and paperwork done right the first time — that let STS mobilize for Operation Matilda in about 30 days.

MISSION IN FOCUS — 1 OF 2

Operation Matilda: Removing Legacy HEU From Venezuela's RV-1 Reactor

NNSA and DNN, working with Venezuela, the United Kingdom, and the IAEA, removed the last of the legacy highly enriched uranium from the RV-1 reactor at the Venezuelan Institute for Scientific Research, outside Caracas — the fuel it operated on from 1961 to 1991. STS served as the domestic transportation, managing every overland movement of the shipment on U.S. soil, drawing on relationships and playbooks built over 20+ years in the research reactor community.



RV-1 site in Venezuela. (Photo: Leapervanche Learning)



Crews load the shipping container at the RV-1 site in Venezuela. (Photo: NNSA)

13.5 kg

HEU removed — 20 UK-origin assemblies, 2 U.S.-origin plates, 6 coupons

<6 Weeks

From the February 2026 site assessment to U.S. arrival

4 Parties

U.S., Venezuela, and the U.K., under IAEA safeguards

PACKAGE

NAC Legal Weight Truck (LWT) cask + 2 equipment ISO containers

MATERIAL

Class 7, Radioactive — bound for H-Canyon at SRS for HALEU downblending

REGULATORY FRAMEWORK

49 CFR Parts 171–180 · 10 CFR Part 71 · DOE transport directives

Alaron, PA
Outbound mobilization



Port of Charleston, SC
Export handoff — STS scope ends at the port gate



Joint Base Charleston, SC
Return receipt, post-import



Savannah River Site, SC
Final disposition

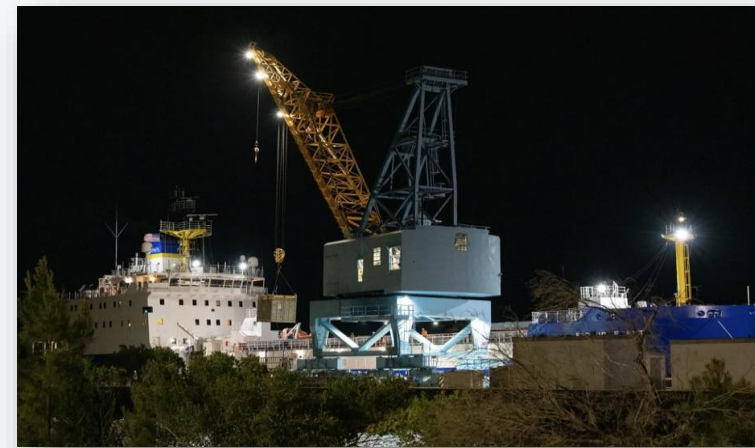
The gold leg — overland to Puerto Cabello and the ocean crossing aboard a UK Nuclear Transport Solutions vessel — was coordinated by DOE/NNSA, the UK, and the IAEA, outside STS scope.

30 Days From Call to Delivery

NNSA Administrator Brandon Williams and DNN Deputy Administrator Matt Napoli oversaw the mission; the IAEA provided safety, security, and safeguards support throughout. A mission of this classification would typically take months to plan — STS compressed its portion into weeks using systems and relationships already in place.

Phase 1 — Outbound Mobilization

- Procured and managed overland transport of the NAC LWT and two equipment ISO containers
- Delivered all three assets from the Alaron facility to the designated Charleston port facility
- Verified cask and container readiness prior to each leg of movement
- STS responsibility concluded at the port gate



Crane unloading casks from vessel at Joint Base Charleston to begin the domestic voyage to SRS. (Photo: SRS)

Phase 2 — Return & Final Delivery

- Coordinated SLED and local law enforcement escorts, JBC to SRS
- Developed the Transportation and Security Plan; filed NRC and Governors' designee notifications
- Arranged the mandatory CVSA Level VI enhanced inspection
- Tracked the shipment via the STS Movement Control Center to confirmed receipt at SRS, where the material moved to H-Canyon for HALEU downblending

≈30 days — written authorization to confirmed delivery at the Savannah River Site

STS Coordinated directly with: DOE · NNSA · NAC International · Joint Base Charleston · SRS · SLED · NRC Operations Center · Governors' designees · IAEA



IAEA safeguards staff verify the cask before transport. (Photo: IAEA)

Beyond Security and Logistics — Engineering, Fabrication, Licensing

- Backed by over 20 years of hands-on transportation, engineering, and in-house fabrication experience.

Transportation & Logistics

Multimodal coordination — truck, rail, air, and vessel — for radioactive and nuclear materials, domestic and international.

Regulatory Expertise

10 CFR Parts 37 & 73, DOE O 473.1B, and DOE M 460.2-1A, plus international frameworks including ADR, IMDG, and ICAO/IATA.

Physical Protection & Security

Vulnerability assessment expertise — Transportation Security Plans, DBT, and RTS — for Category I/II/III movements and security plan upgrades.

Cask Licensing

STS currently has an application in to the NRC and DOT for a cask license on behalf of the DOE

Engineering & Design

In-house 3D CAD modeling, engineering drawings, custom part design, and coordination with national laboratories like ORNL.

Rapid, Specialized Fabrication

Quick-turn, specialized non-QA parts and custom tooling, machined in-house to NQA-1 and ISO 9001:2015-aligned quality practices.

IN-HOUSE MACHINING & FABRICATION



4-axis CNC milling
Precision CNC lathe work
6000W fiber laser cutting
Press brake & plate forming
And More



We're not just a logistics company— offering white glove service from contracting to project close out for your hardest tasks

NANO NUCLEAR ENERGY

One Platform: Reactors, Fuel, and the Fuel Cycle Around Them



NANO Nuclear Energy (Nasdaq: NNE) is a vertically integrated advanced nuclear company built on five business lines: microreactor technology, nuclear fuel fabrication, nuclear fuel transportation, nuclear applications for space, and nuclear industry consulting.

Advanced Fuel Transportation (AFT) — NANO's transportation subsidiary — holds the exclusive license to a patented high-capacity HALEU transportation basket developed with three U.S. national laboratories and funded by DOE. In 2026, AFT acquired STS, bringing logistics experience into the platform.

CLOSING

One Platform. Over 20 Years in the Industry

The work we have done with the research-reactor community has prepared us for moments when experience, trusted relationships, and speed truly matter. Operation Matilda demonstrated what is possible when that foundation is combined with disciplined planning and execution.

Now, as part of NANO Nuclear Energy, STS can bring an even broader set of capabilities to your challenges—while maintaining the responsiveness and personal commitment you have come to expect from us. Whether you are planning a fuel shipment, cask needs, addressing a security need, or solving a specialized engineering problem, engage us early. We are ready to help you move from a complex requirement to a safe, secure, compliant, and successful outcome.

We want to be a resource for this community — not just on shipment days, but in all aspects.

