



IAEA/ANL
Interregional Training Course



**Technical and Administrative Preparations
Required for Shipment of Research Reactor
Spent Fuel to Its Country of Origin**

Argonne National Laboratory
Argonne, IL
13 - 24 January 1997

Lecture L.13.9

**Case Study: Sept. '96 Shipment
from Chile and Columbia to SRS**

Keith Brown

**Science Applications
International Corporation**

International Atomic Energy Agency
Vienna, Austria

Argonne National Laboratory
Illinois, USA

Case Study: Sept. '96 Shipment from Chile and Colombia to SRS

IAEA/USA Inter-Regional Training Course

**January 23, 1997
Argonne, Illinois, USA**

**Keith Brown
Science Applications International Corporation**

Chronology of Activities Leading Up to the South American SNF Shipment

ROD Issued	5/13/96
Assessment Team Visit to Chile, Colombia, and Brazil	6/18-25/96
Second Assessment Team Visit to Colombia	7/23-24/96
NAC-LWT Cask Arrives by Aircraft in Chile	8/1/96
NAC-LWT Cask Arrives via Ship in Colombia	9/4/96
Fuel Loaded in Chile	8/23/96

Chronology of Activities Leading Up to the South American SNF Shipment

(Cont'd)

Vessel Departs Chile for Colombia	8/27/96
Fuel Loaded in Colombia	9/14-15/96
Colombia Cask Airlifted to Cartagena	9/16/96
Vessel Departs Colombia for U.S.	9/16/96
European and South American Vessels Arrive at Charleston, South Carolina	9/22/96
Casks Off Loaded from Vessels and Placed Dedicated Train	9/22/96
Dedicated Train Arrives at Savannah River Site	9/22/96

Challenges Accomplished on the South American Fuel Shipment

- Timely Arrival of the Shipping Cask in Santiago, Chile
- Completion of the Appendix A Data for the Colombian Shipment
- Variance on the Cask Minimum Cooldown Time Requirement on the Colombian Shipment
- Method of Handling the Slightly Irradiated Loose Plates on the Colombian Shipment
- Change to the ROD Concerning the Point at which Title to the Fuel Changes
- Decision to Airlift the Loaded Cask from Bogata to Cartagena, Colombia







ZM-B

ZM-A

ZM-E

ZM-F

ZM-D

19400000
19400000













