Railroad 101
Safety on the Railroad
Safety Rules ... General

- Expect movement on any track at any time.
- Avoid walking between the rails.
- Don’t step or stand on the rail.
- Watch where you step at all times.
Safety ... General

- Look in both directions before stepping across or getting close to tracks.
- Face the TRAIN.
- Keep back 25 FEET from the end of cars.
- Don’t place anything on the track.
- Never get on or under any railroad equipment without approval from railroad personnel.
Safely Cross Equipment

Always use steps & platforms

Drawbar extended
Safely Cross Equipment
Preparing for Potential Railroad Incidents

- Topography
- Road access
- Incident scene divided
- Size of area affected

The most common incident on the railroad is the grade crossing accident
Call the Police Communication Center at **1-800-453-2530**

- Identify what the problem is and where you are
- Highway grade crossings provide a good means of identifying the railroad and an exact location
Public Grade Crossings

Private Crossings

CALL 1-800-946-4744
TO REPORT STALLED
VEHICLE BLOCKING CROSSING
OR OTHER EMERGENCY

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PRIVATE
LOOK

PRIVATE
LOOK

PRIVATE
LOOK
EMERGENCY CONTACT NUMBERS

Norfolk Southern
1-800-453-2530

CSX Transportation
1-800-232-0144

Canadian Pacific
1-800-716-9132

Canadian National
1-800-465-9239

Amtrak
1-800-331-0008

Conrail
1-800-937-5063

BNSF
1-800-795-2673

Union Pacific
1-888-877-7267
Notification Procedures

Norfolk Southern Notification Procedures

TRAIN INCIDENT OCCURS

NS Train Crew/Yard Crew
- Yard — Surveys scene and notifies Yardmaster/Trainmaster
- Mainline — Surveys scene and notifies Train Dispatcher

NS Conductor
- Remains at scene until emergency response agency arrives
- Provides train consist information and location(s) of hazmats

NS Yardmaster/Trainmaster
- Notifies local 911
- Notifies Train Dispatcher

NS Train Dispatcher
- Notifies emergency response agency responsible for the incident location and Norfolk Southern Operations Control Center plus the following:
  - NS Environmental Protection Department
  - CHEMTREC (1-800-424-9300)
  - NS Division Superintendent
  - NS Trainmaster
  - State and Local Government Agencies
  - Shipper
  - Environmental Contractors
  - AAR — BOE Inspector

NS Police
Local 911

NS Operations Control Center
Atlanta, GA

National Response Center (NRC)
1-800-424-8802
Unified Command – Railroad Branch
Railroads Operating Departments

- **Transportation:** Moves freight from Point A to Point B
- **Mechanical:** Maintains all the rolling stock
- **Engineering:** Builds and maintains the infrastructure

The Senior Transportation Officer will always be the IC for the railroad.

The Safety & Environmental Department supports all three.
Fire Hoses

- Contact the Railroad *First!*
- Report *any* right-of-way use to Railroad.
- Protect personnel and equipment.
Fire Hoses

- Avoid making three short hoses.
- Obtain railroad assistance for extended operations.
- Consider installation of piping with connections in critical locations.
Rail Equipment
Low-Pressure Tank Car
Pressure Tank Cars
Cryogenic Tank Car

Valves are in a control box at ground level.
Tank Car Markings

CAR INITIAL & NUMBER (REPORTING MARKS)

WEIGHT LIMITS

Tank Capacity

SPECIFICATION STENCIL

QUALIFICATION STENCIL
Flat Cars

Lumber
Pipe or steel
Machinery or vehicles

Watch for loose straps!
“Gons” Gondolas

- Scrap
- Dirt
- Waste
Hoppers

- **Covered Hoppers**
  - Dry commodities
  - Fertilizer (Oxidizer)
  - Plastic Pellets
  - Cement
  - Grain

- **Open Hoppers**
  - Coal, gravel
Box Cars

- Carry many commodities.
- May be insulated.
- May have cryogenic gases within.
- Doors and “Plug Doors” (if damaged) can fall on rescuers.
Mechanical Refrigerator Car

- Diesel engine:
- Lube oil
- Battery acid
- Coolant
- Ignition source

300-650 Gallon Diesel Tank
Automobile Carriers or “AutoRack”

- Up to 18 vehicles
- Fuel
- Hydraulic fluid
- Antifreeze
- Freon
- Plastics
- Air Bag Inflators
- Tires
- “Passengers”?
Intermodal Shipments

- Fastest growing traffic on Railroads
- Also known as TOFC and COFC or piggyback shipments
  - TOFC - Trailer on Flat Car
  - COFC - Container on Flat Car
- Containers and trailers can be on a flat car or in a “double Stack” well car
**TOFC / COFC**

- Trailer on Flatcar
- Container on Flatcar
- DOT Placarding
Intermodal Portable Tank Container

IM Portable Tanks Flat on Deck or on Spine Car
Right vs Left

Top View

“A” End

“B” End Handbrake

Right Side

R-4
R-3
R-2
R-1

Left Side

Side View

“A” End

“B” End Handbrake

ALU
ALL
BLU
BLL
Emergency Response Contractors
Questions???