

INTRODUCTION

Johnny, after eating six large green apples went to his mother and said,

“Mommy eating too much green apples will give you a tummy ache”.

She replied, how can you be so sure, Jonnie ?

Jonnie said, “BECAUSE I HAVE INSIDE INFORMATION”

Let me take this opportunity to say how delighted it
is to present on this vital topic:
“PORT SECURITY”

Though a very complex topic to present in such a short space of time:

**It is my intention to highlight a few areas of this vast topic and give
you some “INSIDE INFORMATION” on how beneficial “PORT
SECURITY” is and the major role it can play in effective and efficient
management of Maritime Ports and Harbors.**

Maritime Domain Definition

- **All areas and things of, on, under, relating to, adjacent to, or bordering on a sea, ocean, or other navigable waterway, including all maritime-related activities, infrastructure, people, cargo, and vessels and other conveyances**



Maritime Domain Components (1)

- This section highlights the seven components of the maritime domain:
 - Infrastructure
 - Internal waters
 - Territorial seas
 - International waters
 - Contiguous zone
 - Exclusive economic zone
 - High seas

Maritime Domain Components (2)

- **Infrastructure**: all facilities within the port area
 - May include local businesses, financial institutions, schools, and port-specific organizations
 - Vital to port operations in some way and would be affected by a port shutdown



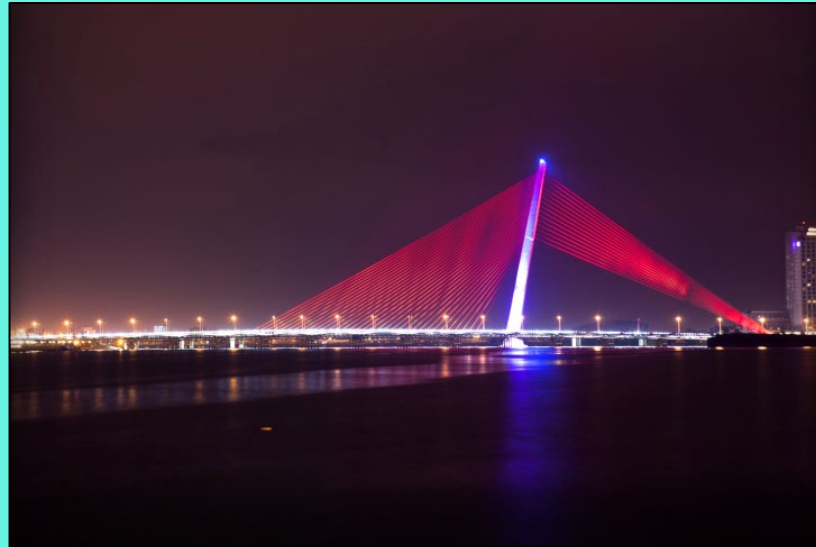
Maritime Domain Components (3)

- **Support systems:**
 - Electricity
 - Water
 - Sewage
 - Communications
 - Information technologies



Maritime Domain Components (4)

- **Shipping channels and ferry routes:**
 - Highway and bridge systems
 - Freight railways
 - Passenger railways
 - Bus systems



Maritime Domain Components (5)

- **Internal waters**: the port facilities, harbor, anchorage, and other navigable waterways of a maritime domain
 - Nation has complete authority and jurisdiction over all vessels



Maritime Domain Components (6)

- **Territorial seas**: an internationally recognized area extending 12 nautical miles from the baseline or low water mark of a coastal nation
 - An area of water where the state has jurisdiction
 - Sovereignty extends to airspace above and seabed below
 - Foreign ships are usually allowed innocent passage through this zone



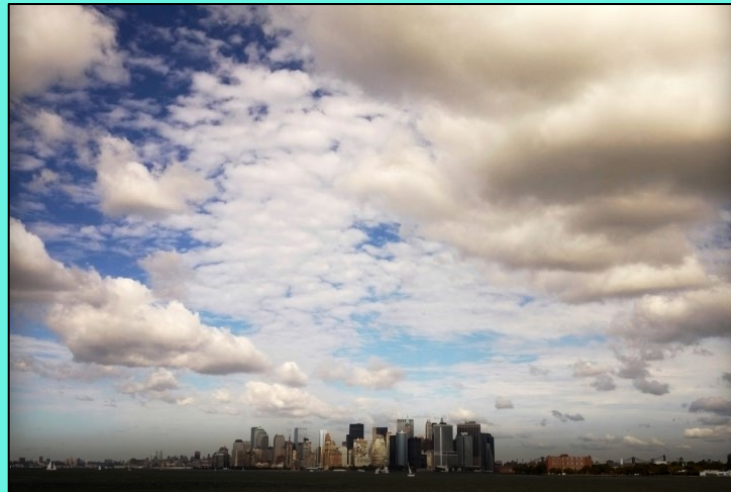
Maritime Domain Components (7)

- **International waters**: all ocean areas not subject to the territorial sovereignty of any nation including those seaward of the territorial sea in which the international community reserves navigation freedoms; they include contiguous zones, exclusive economic zones, and high seas



Maritime Domain Components (8)

- **Contiguous zone**: an internationally recognized area extending 24 nautical miles from the baseline or low water mark of a coastal nation
- Extends law enforcement authority of nation beyond territorial sea



Maritime Domain Components (9)

- **Exclusive economic zone**: an internationally recognized area extending 200 nautical miles from the baseline or low water mark of a coastal nation
 - Nation controls rights to all economic resources within the zone

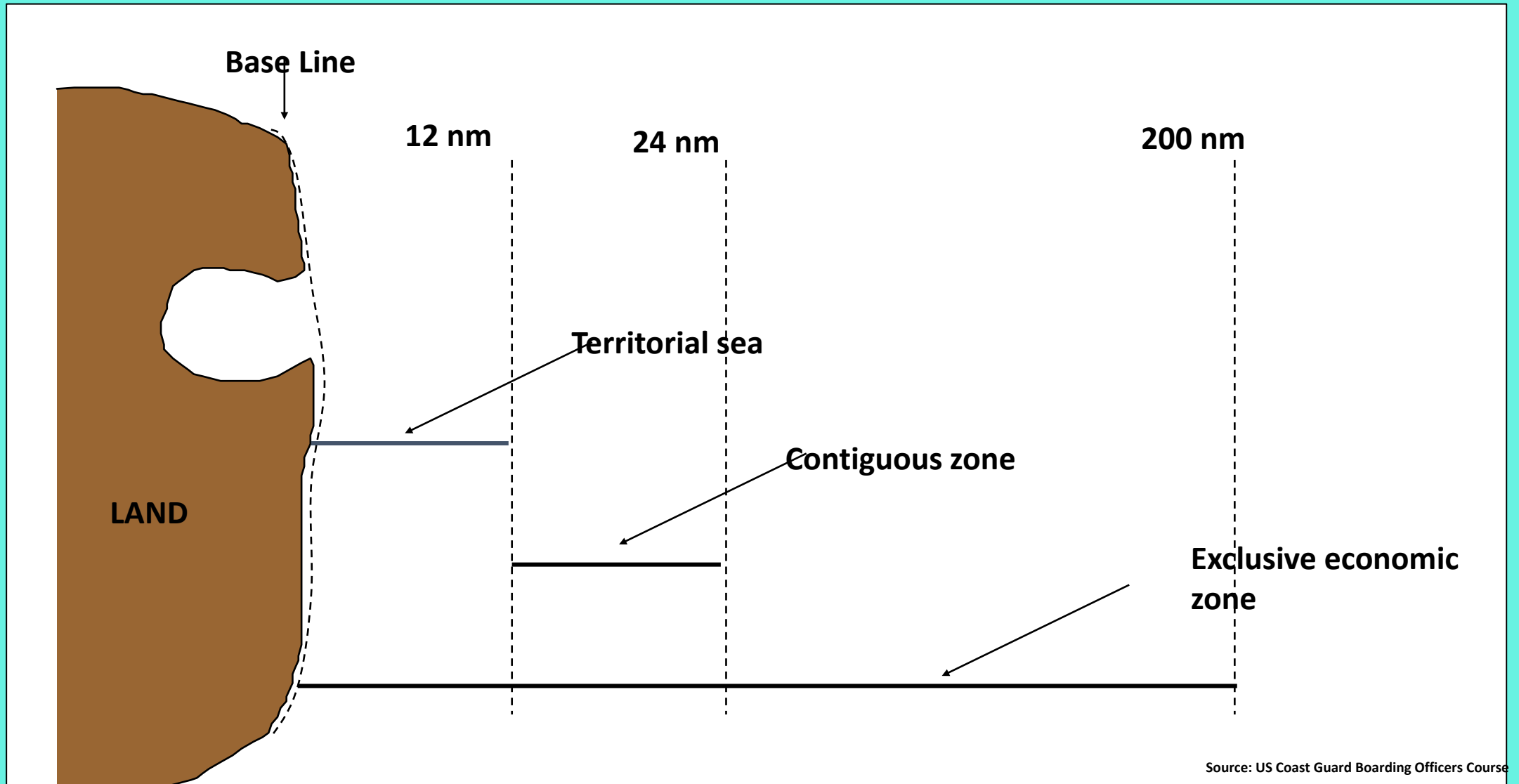


Maritime Domain Components (10)

- **High seas**: all parts of the sea that are not included in the exclusive economic zone, in the territorial sea, or in the internal waters of a nation, or in the waters within the outermost islands of an archipelagic nation

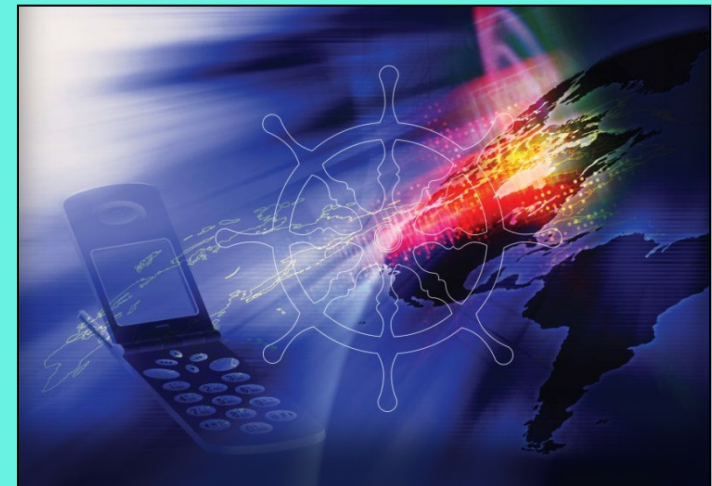


Maritime Domain Components (11)



Global Maritime Trends

- **This section will cover seven current trends:**
 - **Information technologies**
 - **Globalization**
 - **Global economy**
 - **Shipping**
 - **Demographics**
 - **Climate change**
 - **Non-state factors**



Information Technologies

- Broadly describe anything relating to computers, information, and communications
- Allow users to store, retrieve, analyze, and transmit information related to maritime industries and operations to safely and efficiently administer the port



Globalization (1)

- The process of international integration arising from the interchange of worldviews, products, ideas, and other aspects of culture
- Nations are increasingly affected by events occurring beyond their borders, such as new technology, civil unrest, or developing markets for foreign investment or trade

Globalization (2)

- **Economic growth — developing countries demand more products**
- **Advances in technology:**
 - **Communications**
 - **Port and cargo process**
 - **Shipboard technology**
- **Velocity of freight — pace at which trade occurs**

Stakeholder Categories

- Maritime authorities
- Captain of the port, harbormaster, or equivalent
- Emergency services
- Military
- Unions
- Commercial entities
- Other maritime interests

Examples of Stakeholders (1)

- National law enforcement authorities
- State and local law enforcement
- National security facilities
- Captain of the port or equivalent
- Local and regional emergency management agencies



Examples of Stakeholders (2)

- **Critical infrastructure**
- **Pilots**
- **Stevedores and longshoremen (dock workers or laborers)**
- **Tow or barge operators**
- **Industry maritime associations**
- **Commercial terminal operators**



Suspicious Activity

- Any unusual event or occurrence out of the ordinary



The 7 Signs of Terrorism

- **Signs/signals that may precede incident:**
 - 1. Surveillance** – Specific target area will be observed during planning phase of operation
 - 2. Elicitation** – Attempts to gain information on a place, person, or operation may be part of planning process
 - 3. Tests of security** – Attempts to gather data on an asset's security capabilities/standard response

The 7 Signs of Terrorism (Continued)

- 4. Acquiring supplies – Terrorists need supplies to carry out an attack**
- 5. Suspicious people – Observe suspicious people who just “do not belong”**
- 6. Dry runs – Before executing final operation or plan, practice session may be run**
- 7. Deploying – The final sign or is someone deploying assets or getting into position**

What Is ICS?

- **Standardized, on-scene, all-hazard incident management concept**
 - **Integrated organizational structure**
- **Matches complexities and demands of single or multiple incidents**
- **Is not hindered by jurisdictional boundaries**

ICS Purposes

- **Using management best practices, ICS helps ensure:**
 - **Safety of responders and others**
- **Achievement of tactical objectives**
- **Efficient use of resources**



ICS Benefits

- Meets needs of incidents of any kind or size
- Allows personnel from different agencies to meld rapidly into a common management structure
- Provides logistical and administrative support to operational staff
- Is cost effective by avoiding duplication of efforts

How can ICS be Used?

- ICS has been utilized for over 30 years to:
 - Meet demands of small or large emergency or non-emergency situations
 - Become the standard for emergency management in over 10 countries
 - Respond to natural disasters/acts of terrorism
 - Perform search and rescue missions
 - Manage biological disease outbreaks

The Four Response Elements

1. Who are the agencies responding
2. What resources are they bringing
3. How will the response be organized
4. What type of communications will be utilized during the response



Resources

- What are the agencies bringing
 - Personnel (qualifications/ experience)
 - Equipment
- Multi-purpose resources
 - Used for all/most incidents/ events
- Specialized resources
 - Tactical – for use in specific incidents and/or scenarios



“INSIDE INFORMATION” HURRICANE DORIAN



Hurricane Dorian was one of the strongest Atlantic hurricanes on record -- and the strongest hurricane to have ever hit The Bahamas.

Dorian hit The Bahamas on September 1, 2019 as a Category 5 hurricane, causing flooding and mass destruction on the northwest islands of Abaco and Grand Bahama. The storm pummeled Grand Bahama Islands for 48 long hours before finally moving away from the islands.

According to the [Inter-American Development Bank](#), Dorian caused about [\\$3.4 billion](#) in damages, which is equal to one-quarter of The Bahamas' GDP.

The current death toll stands at 74 people, with 63 from Abaco and 22 from Grand Bahama, although 245 people are still missing a year later. In addition to the loss of lives, 29,500 people are homeless and/or jobless.

Now, with the added crisis of COVID-19 and another hurricane season beginning, the islands' recovery efforts are adapting to the new normal of 2020.

**THIS STORM WENT FROM CAT-5 TO CAT-HELL
80% OF THE ISLAND WAS FLOODED**







PORT SECURITY

THE PORT AND HARBOR WAS OUR LIFELINE IN THE AFTERMATH OF HURRICANE DORIAN AND THE PANDEMIC.

WHEN THE AIRPORT WAS HINDERED DUE TO FLOODING, THE PORT WAS OPEN AND FUNCTIONING.

FREEPORT HARBOUR COMPANY

- **GRAND BAHAMA SHIPYARD**
- **FREEPORT CONTAINER PORT**
- **FREEPORT CITY SERVICES**
- **BRADFORD MARINE**
- **OTHER PRIVATE OWNERS**







During and after Hurricane Dorian

Incident Command System was utilized in the following ways:

Unified – ICS

Combined - ICS = the connection of various Commands connecting and sharing vital information to avoid duplication of efforts.

Extended ICS = remain in operation long after the storm.

- I worked as the representative of the Royal Bahamas Police Force { RBPF } in the Emergency Operations Centre { EOC } headed by the National Emergency Management Agency { NEMA } which was a unified command center.

In the aftermath of the storm during the rescue and recovery mode, the majority of the equipment needed came in through our Ports.

Rescue Vehicles and Vessels

K-9 units

Medical Supplies

Power Company Vehicles

Water Utility Equipment

PORT SECURITY

- Heavily Impacted
- The center of major activity 24/7
- Additional Security Officers were hired from local Security Companies.
- Supplemented by Police and other law enforcement authorities.
- Survived the test due to good Maritime Port and Harbor Security Management.
- The implementation of Port Security benefits are unbeatable.

CONCLUSION

- We survived Hurricane Dorian and are successfully ending the Covid-19 Pandemic, which caused us to rely more on our Ports and Harbors due to the lockdown and cancellation of Airline industry.
- A review of our Ports and Harbors revealed their sustainability throughout the major disasters and Pandemic. Regardless, daily operations continue with limitations and a view of returning to a state of normality.

NEEDS ASSESSMENT

- **RE-CERTIFICATION OF TRAINED PERSONNEL**
- **REFRESHER COURSE SCHEDULE**
- **TRAINING**
- **PREVENTATIVE MAINTENANCE**
- **EQUIPMENT UPDATE**
- **TABLE-TOP EXERCISE**
- **DRILLS**

FREEPORT CONTAINER PORT





Radiological Materials List

Primary Isotope Category	Special Nuclear Material		Industrial Isotopes										Medical Isotopes							Natural Radionuclides				
	ALWAYS INVESTIGATE																							
Isotope	Neutron Emitter	Neutron Absorber	Neutron Source	Neutron Detector	Neutron Shielding	Neutron Moderator	Neutron Reflector	Neutron Converter	Neutron Filter	Neutron Separator	Neutron Transporter	Neutron Storage	Neutron Processing	Neutron Recycling	Neutron Disposal	Neutron Monitoring	Neutron Control	Neutron Safety	Neutron Security	Neutron Compliance	Neutron Reporting	Neutron Investigation	Neutron Enforcement	Neutron Prosecution
Weapons Usable Material	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Special Nuclear Material	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
US	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Nuclear Fuel Assemblies	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Uranium Ore Concentrates	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Potential Radiological Weapons	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Medical	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Radiological Medical Treatments	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Medical Source Shipments	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Consumer Products	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Chlorine Jewelry	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Dental Ceramics	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Gels and Gases	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Fertilizer	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Common Building Materials	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Cement	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Clay (Adobe) Brick	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Concrete	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Refract	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Granite	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Marble	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Sandstone	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Tile	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Hardwood/Gypsum	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Wood	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Equipment	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Aircraft Counterweights	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Aircraft Engine Components	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Calibration Sources	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Electronic Equipment	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Gamma Ray Imaging Systems (NAICS)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Glow Lamps	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Grip Composites	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Industrial Gages	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Neutron Detection Instruments	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Optical Camera Lenses	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Painting Powder	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Radiography Sources	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Radioisotopic Products	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Radioisotope Thermoelectric Generator (RTG)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Large Protection	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Thickened welding Rods	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Tunnel Borehole (Steelmaking)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Voltage Regulation	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Well Logging Equipment	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Food	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Bread Flour	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Bulk Tobacco	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Coffee	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Rice	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Household Items	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Gas Lantern Mantles	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Fertilizers	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Fluorescent Lamp Starters	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Cold Spray/Cat Litter	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Use Salt	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Propane	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Shells - Wood	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Smoke Detector	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Television	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Tires	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Waste	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Natural Gas Tanks	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Chemical Processing Waste Material	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Offense Soap Material	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Radioactive Minerals	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Alum (Shale Gypsum)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Asbestos (Gypsum byproduct)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Brick	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Coal Ash	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Gravel	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Kerogen	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Limestone	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Marble	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Metallurgical Sand	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Mica	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Phosphates	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Phosphogypsum	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Shale	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Slate	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Uranium Concentrate	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

Smaller detection in former Soviet Union often contain plutonium-239

This product was developed by The Pacific Northwest Laboratory (PWL) for the U.S. Office of the Secretary of Defense.

U.S. GOVERNMENT ENERGY NNS

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CHEMICAL BIOLOGICAL RADIOLOGICAL NUCLEAR EXPLOSIVES {CBRNE} OPERATIONS EQUIPMENT



FINAL THOUGHTS

The use of Maritime Port Security is an overall system that covers other modes of transportation and other industries, which can allow you to effectively manage a network of security for not only the Port area but all of your critical assets.

If properly established, managed, and communicated to the Port Stakeholders, a tried successful system can be a very useful tool in helping manage risk and ensuring that security measures are consistent for vessels and facilities throughout the entire port area.

THANK YOU FOR YOUR ATTENTION



Questions