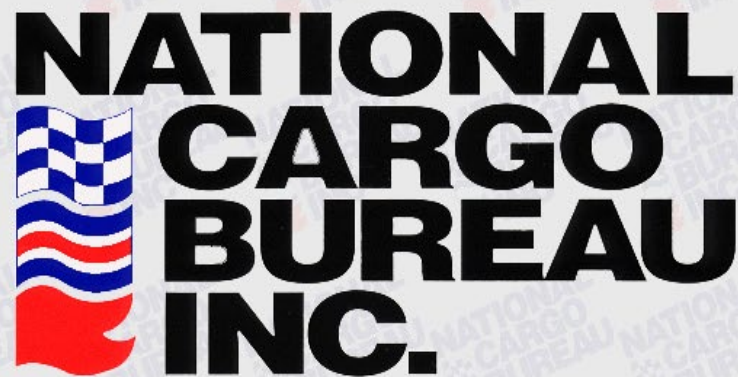




National Cargo Bureau Presentation

by, Anthony Atthowe, Staff Surveyor, Port of Portland



...Safety of Life
and Cargo at Sea...

National Cargo Bureau was created in 1952 by the U.S. Coast Guard as a not-for-profit organization in order to assist the Coast Guard in the discharge of their responsibilities under the Safety of Life at Sea (SOLAS) Convention of 1948 and other purposes closely related thereto, and was given the mission of “Safety of Life and Cargo at Sea”

1947 Texas City Disaster

The deadliest industrial accident in US history occurred in Texas City, Texas on 16-17 April 1947



**Over 550 lives lost and
more than 5000 injured**



500+ Homes
Destroyed

Army, Navy and Relief Agencies Rush Aid To Blast Scene

Guard those you love...
GIVE to Conquer Cancer

The Port Arthur News

STORY IN COLUMN ONE

Tomorrow's Weather
Partly Cloudy
Check the forecast on page 1

FORTY-SIXTH YEAR—NO. 191

Published twice a day, 10¢ each copy

PORT ARTHUR, TEXAS, THURSDAY, APRIL 17, 1942.

30 PAGES

PRICE FIVE CENTS

914 FEARED DEAD IN TEXAS CITY

Planes Rushing
Blood, Medicine
To Stricken Area

Red Cross, Salvation
Army Giving Relief;
Refugees Are Housed

The Associated Press
And within the power and resources of the United States Army, the U. S. Navy, the American Red Cross, the Salvation Army, the Salvation Army, and other agencies of private citizens, are working to help the victims of the disaster.

All kinds of planes, including bombers, fighters, and transports, are rushing to the scene of the disaster. The planes are carrying blood, medicine, and other supplies to the victims of the disaster.

The Red Cross is giving relief to the victims of the disaster. The Salvation Army is giving relief to the victims of the disaster. Refugees are being housed in the city.

The Associated Press
The Associated Press is reporting that the disaster has caused the death of 914 people. The Associated Press is reporting that the disaster has caused the death of 914 people.

The Associated Press
The Associated Press is reporting that the disaster has caused the death of 914 people. The Associated Press is reporting that the disaster has caused the death of 914 people.

The Associated Press
The Associated Press is reporting that the disaster has caused the death of 914 people. The Associated Press is reporting that the disaster has caused the death of 914 people.

The Associated Press
The Associated Press is reporting that the disaster has caused the death of 914 people. The Associated Press is reporting that the disaster has caused the death of 914 people.

The Associated Press
The Associated Press is reporting that the disaster has caused the death of 914 people. The Associated Press is reporting that the disaster has caused the death of 914 people.

The Associated Press
The Associated Press is reporting that the disaster has caused the death of 914 people. The Associated Press is reporting that the disaster has caused the death of 914 people.

Roaring Flames, Billowing Smoke . . . and Destruction and Death in Texas City



Roaring flames and billowing smoke mark the scene of destruction and death at the plant of the Goodrich Chemical company at Texas City, as photographed from the sky Wednesday by Coast Guard plane. The entire upper portion of a column of the building is shown here, as it was destroyed by the explosion. Many bodies were still in the plant when the photograph was made. For other graphic photos, see Pages 2 and 3.

Flood of Condolence Messages Is Received

Gen. Eisenhower Assures Gov. Justice Army Will Send All Aid Needed; Georgia, London, Paris Offer Sympathy

AUSTIN, April 17 (AP)—Messages offering aid and condolence to the people of Texas and particularly to those at Texas City poured into the governor's office today from all over the world.

The Associated Press
The Associated Press is reporting that the disaster has caused the death of 914 people. The Associated Press is reporting that the disaster has caused the death of 914 people.

The Associated Press
The Associated Press is reporting that the disaster has caused the death of 914 people. The Associated Press is reporting that the disaster has caused the death of 914 people.

The Associated Press
The Associated Press is reporting that the disaster has caused the death of 914 people. The Associated Press is reporting that the disaster has caused the death of 914 people.

The Associated Press
The Associated Press is reporting that the disaster has caused the death of 914 people. The Associated Press is reporting that the disaster has caused the death of 914 people.

The Associated Press
The Associated Press is reporting that the disaster has caused the death of 914 people. The Associated Press is reporting that the disaster has caused the death of 914 people.

The Associated Press
The Associated Press is reporting that the disaster has caused the death of 914 people. The Associated Press is reporting that the disaster has caused the death of 914 people.

Tentative List Of Casualties

PORT ARTHUR, Tex., April 17 (AP)—A tentative list of the names of the victims of the disaster at Texas City was made today.

The Associated Press
The Associated Press is reporting that the disaster has caused the death of 914 people. The Associated Press is reporting that the disaster has caused the death of 914 people.

The Associated Press
The Associated Press is reporting that the disaster has caused the death of 914 people. The Associated Press is reporting that the disaster has caused the death of 914 people.

The Associated Press
The Associated Press is reporting that the disaster has caused the death of 914 people. The Associated Press is reporting that the disaster has caused the death of 914 people.

The Associated Press
The Associated Press is reporting that the disaster has caused the death of 914 people. The Associated Press is reporting that the disaster has caused the death of 914 people.

The Associated Press
The Associated Press is reporting that the disaster has caused the death of 914 people. The Associated Press is reporting that the disaster has caused the death of 914 people.

The Associated Press
The Associated Press is reporting that the disaster has caused the death of 914 people. The Associated Press is reporting that the disaster has caused the death of 914 people.

The Associated Press
The Associated Press is reporting that the disaster has caused the death of 914 people. The Associated Press is reporting that the disaster has caused the death of 914 people.

Strike Is Closing Plant of Goodrich

PORT ARTHUR, April 17 (AP)—Twenty-two members of the Goodrich Chemical plant at Texas City are on strike today.

The Associated Press
The Associated Press is reporting that the disaster has caused the death of 914 people. The Associated Press is reporting that the disaster has caused the death of 914 people.

The Associated Press
The Associated Press is reporting that the disaster has caused the death of 914 people. The Associated Press is reporting that the disaster has caused the death of 914 people.

The Associated Press
The Associated Press is reporting that the disaster has caused the death of 914 people. The Associated Press is reporting that the disaster has caused the death of 914 people.

The Associated Press
The Associated Press is reporting that the disaster has caused the death of 914 people. The Associated Press is reporting that the disaster has caused the death of 914 people.

The Associated Press
The Associated Press is reporting that the disaster has caused the death of 914 people. The Associated Press is reporting that the disaster has caused the death of 914 people.

The Associated Press
The Associated Press is reporting that the disaster has caused the death of 914 people. The Associated Press is reporting that the disaster has caused the death of 914 people.

The Associated Press
The Associated Press is reporting that the disaster has caused the death of 914 people. The Associated Press is reporting that the disaster has caused the death of 914 people.

714 Known Victims Of Major Disaster

200 Believed Buried Under Debris; Second Ship Explodes at Docks Early This Morning

BY ROBERT E. BROWN
TEXAS CITY, Tex., April 17 (AP)—While flames fought at least eight raging oil fires today in the shattered Texas Gulf coast industrial town which was rocked by two blasts—one of which disintegrated another freighter at the docks—national headquarters of the Red Cross reported today 714 were known dead in the Texas City explosion.

This figure does not include the Red Cross said, approximately 200 dead "believed" to be buried in the debris along the city's waterfront where the first blast occurred.

The information, headquarters said, came from John C. Wilson of 26 Lewis, manager of the Red Cross midwestern office in St. Louis, who is working with the Red Cross in Texas.

More than 2000 were injured, the Red Cross reported, in one of the great tragedies of American disaster history. Under great stress was being retained, the Red Cross said.

MORE THAN 400 BODIES COUNTED
But no accurate figures could be made better than a guess. More than 400 bodies had been counted. Not until the flames subsided could the thousands of rescue workers hope to reach other bodies—perhaps scores, perhaps hundreds—in the waterfront ruins.

The vast Monsanto Chemical company plant, left a "ruined shell," may hold the fate of many persons, officials said. About 800 were working there Wednesday morning when a French freighter loaded with nitrate blew up, throwing clouds of steel for miles and setting off the chain of blasts and fires.

The fate of persons aboard the French liner ship Grand Camp and the American freighter High Flyer, which was torn to bits by an explosion today—15 hours after the Grand Camp explosion—was unknown. The news that the ship aboard the French ship had survived came from the French Lines office in New York, which said that at least five were alive, two of them seriously injured.

J. C. Totten, mayor of this town which Wednesday had 18,000 inhabitants of whom half already had fled, said he believed all danger of further major explosions had passed.

Eight Oil Fires Counted
But United Press correspondents, passing from the damaged windows of an upstart story of the city headquarters which a United States fire barge at half mast were in at least eight oil fires smoldering today, said flames, topped with pillars of black smoke, loomed the sky.

A work, which blew the water and engine from out from Galveston bay, and helped to keep the flames from spreading inland. Of it, Deputy Mayor J. H. Hill said: "The Lord is on our side."

But he emphasized that: "We are not out of the woods yet."

Supplies of gasoline, a chemical of equal value in fighting oil fires, were rushed into the town by truck and boat from Houston and Houston. There was a report that dynamite might be used to back the flames if they spread further.

The town was only a few miles from the Gulf coast, and the yellow-splashed bodies of the dead lay in long rows for miles.

Fred I. Luffman Is Killed in Blast

Former Port Arthur Was in Dock Area at Time

PORT ARTHUR, Tex., April 17 (AP)—Twenty-two members of the Goodrich Chemical plant at Texas City are on strike today.

The Associated Press
The Associated Press is reporting that the disaster has caused the death of 914 people. The Associated Press is reporting that the disaster has caused the death of 914 people.

The Associated Press
The Associated Press is reporting that the disaster has caused the death of 914 people. The Associated Press is reporting that the disaster has caused the death of 914 people.

The Associated Press
The Associated Press is reporting that the disaster has caused the death of 914 people. The Associated Press is reporting that the disaster has caused the death of 914 people.

Jaycee Banquet Set for Tonight

Mexico City Attorney To Be Main Speaker

The annual dinner of the Jaycees of Port Arthur will be held at the Port Arthur Hotel tonight.

The Associated Press
The Associated Press is reporting that the disaster has caused the death of 914 people. The Associated Press is reporting that the disaster has caused the death of 914 people.

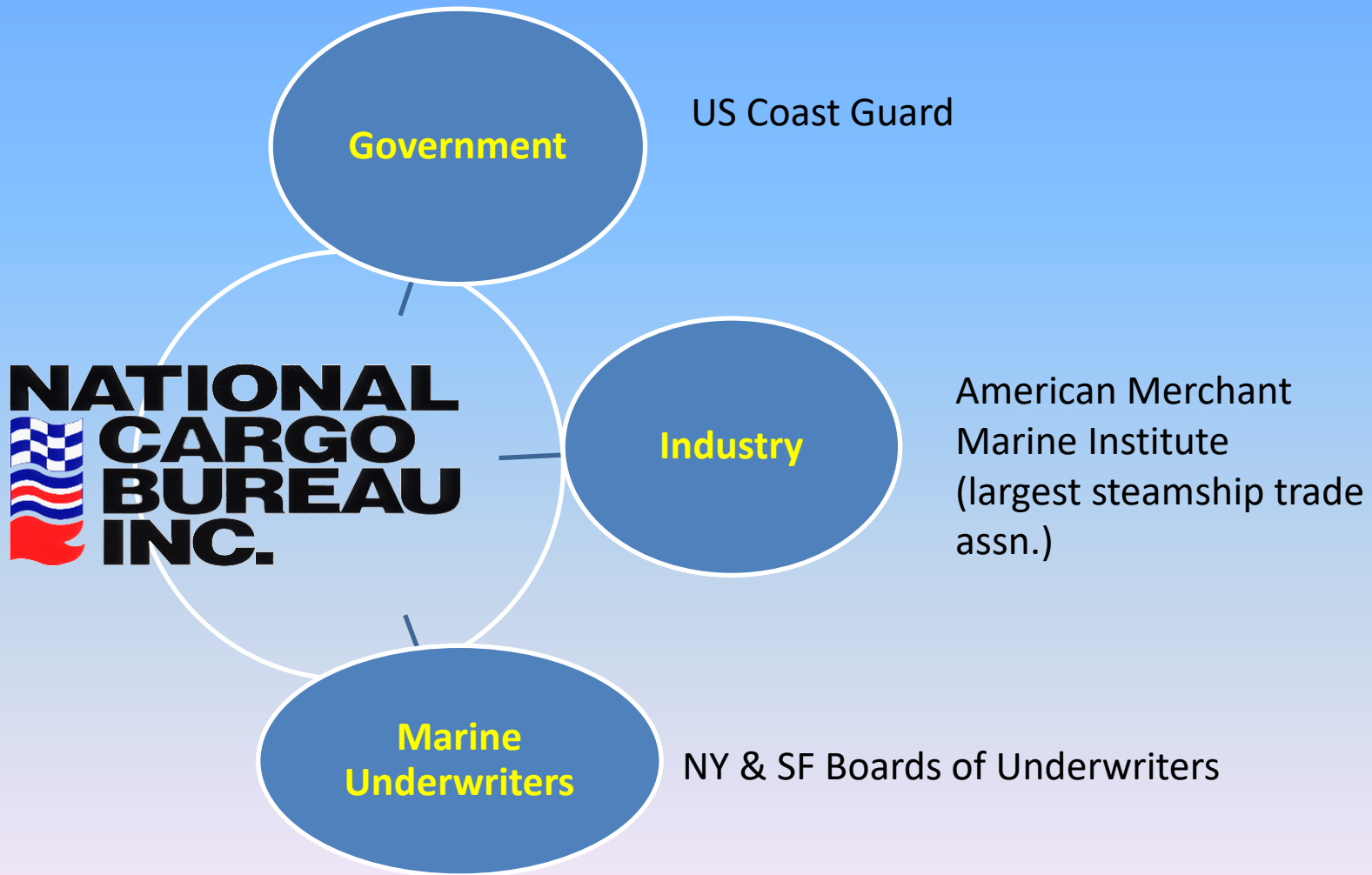
The Associated Press
The Associated Press is reporting that the disaster has caused the death of 914 people. The Associated Press is reporting that the disaster has caused the death of 914 people.

1947 Texas City Disaster



Ammonium Nitrate reaches explosive threshold
onboard SS Grandcamp. Massive Explosion
destroys vessel and port

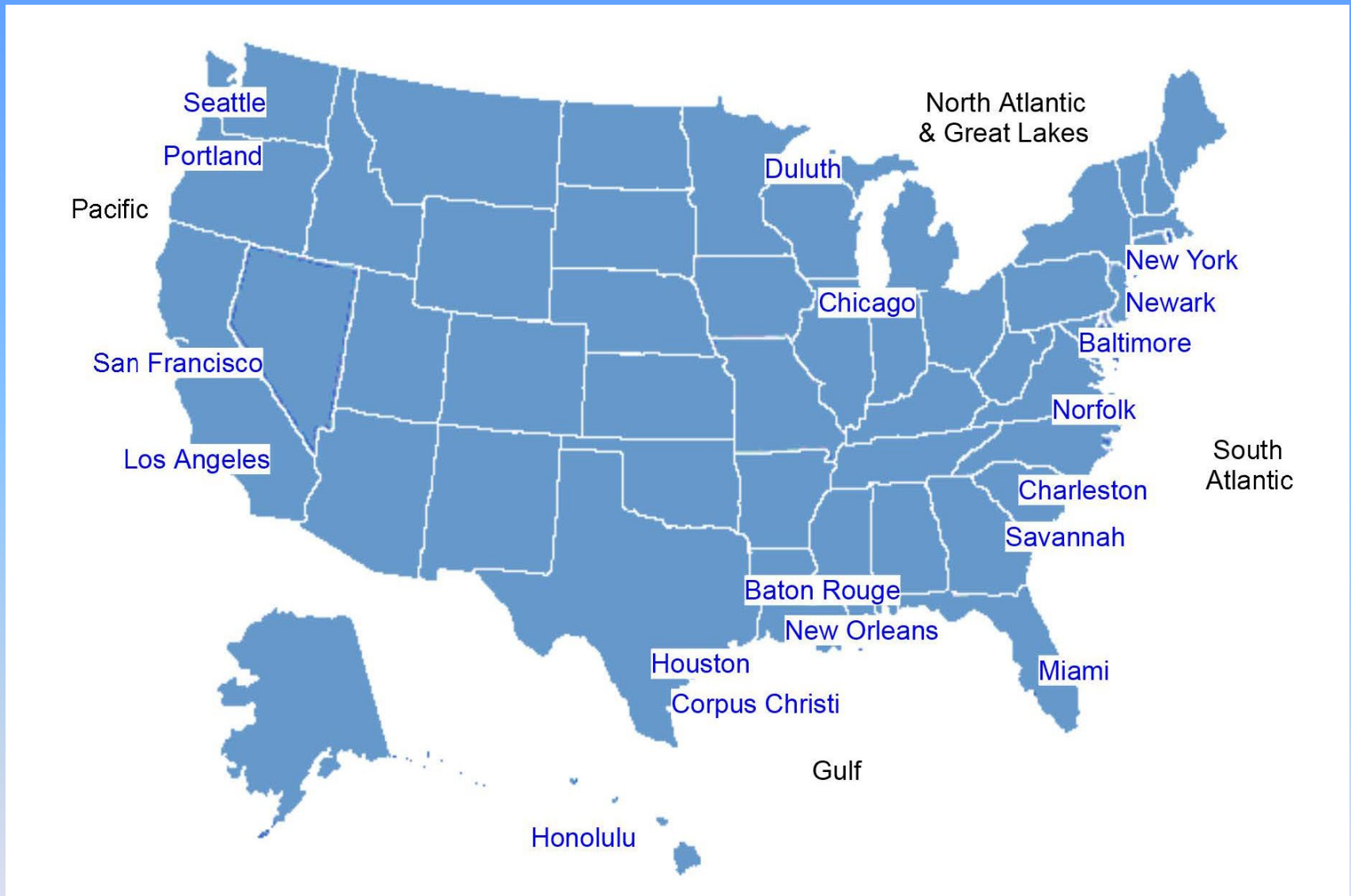
1952 PARTNERSHIP PLAN



National Cargo Bureau Created



- NCB was incorporated as a not for profit membership organization on May 6, 1952
- The surveying staff of the Board of Underwriters of New York and the Board of Marine Underwriters of San Francisco became the first surveying staff of National Cargo Bureau
- NCB started operations on November 19, 1952, the same day the 1948 SOLAS Convention went into effect



Currently a staff of 70 Surveyors throughout 18 port offices.

National Cargo Bureau Activities that Support US Coast Guard

- Hazmat Container Inspections - over 20,000 containers in 2021
- Hazmat Training and Onboard Seminars
- DCM and Stow Plan Review - 49CFR/IMDG compliance onboard vessels
- US Delegation to IMO
- US representation on international correspondence and working groups
- Hazmat Policies (e.g. Terminal Operations)
- Flat Rack Inspections – over 8,000 in 2021
- Grain Loading Inspections –over 2600 in 2021

46CFR 172.040 Grain Certificate of Loading

172.040 Certificate of loading.

- (a) Before it sails, each vessel that loads grain in bulk, except vessels engaged solely on voyages on the Great Lakes, rivers, or lakes, bays, and sounds, must have a certificate of loading issued by an organization recognized by the Commandant for that purpose. The certificate of loading may be accepted as prima facie evidence of compliance with the regulations in this subpart.
- (b) **The Commandant recognizes the National Cargo Bureau, Inc.,for the purpose of issuing certificates of loading.**

Vessel loading Grain





NATIONAL CARGO BUREAU, INC. GRAIN STABILITY CALCULATION FORM

* (Required for vessels loading bulk grain in the United States of America)

M.V. Liberty Eagle		YEAR BUILT 2003
COUNTRY OF REGISTRY United States	NET TONNAGE 17820	IMO NO. 9278753
AGENT T. Parker Host		AT CITY Oshima IN COUNTRY Japan

GRAIN LOADING BOOKLET APPROVED BY National Cargo Bureau, Inc.
 ON BEHALF OF (FLAG STATE) United States
 DRAWING NO. 20041000 DATE OF APPROVAL 22 December 2003
 APPLICABLE REGULATIONS International Grain Code
 ADDENDUM FOR UNTRIMMED ENDS APPROVED BY Included in booklet
 DRAWING NO. _____ DATE OF APPROVAL _____
 LOADING PORT(S) Norfolk, USA
 BUNKERING PORT(S) Balboa, Panama
 DISCHARGE PORT(S) Dahlian, China
 STEAMING DISTANCE 10388 MILES MILES PER DAY 324 TIME 32.1 days
 DAILY CONSUMPTION: FUEL 28.5 mt DIESEL 2.0 mt WATER NIL

	DISPLACEMENT	DEADWEIGHT	DRAFT	FREEBOARD
**WINTER	<u>59484.0 mt</u>	<u>50418.0 mt</u>	<u>12.021 m</u>	<u>4.676 m</u>
SUMMER	<u>60878.0 mt</u>	<u>51812.0 mt</u>	<u>12.277 m</u>	<u>4.420 m</u>
**TROPICAL	<u>62770.0 mt</u>	<u>53211.0 mt</u>	<u>12.533 m</u>	<u>4.164 m</u>

FRESH WATER ALLOWANCE 0.279 m TPC/TPH (AT SUMMER DRAFT) 54.56 mt
 * EXCEPT FOR EXEMPTED VOYAGES
 ** IF APPLICABLE

THIS IS TO CERTIFY THAT:

1. THIS CALCULATION IS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE VESSEL'S GRAIN LOADING BOOKLET AND THE APPLICABLE GRAIN REGULATIONS.
2. THE STABILITY OF THE VESSEL WILL BE MAINTAINED THROUGHOUT THE VOYAGE IN ACCORDANCE WITH THIS CALCULATION.

CALCULATION PREPARED BY:
 (TO BE COMPLETED IF THE FORM IS PREPARED
 BY OTHER THAN SHIP'S PERSONNEL)

NAME (PRINT) _____
 COMPANY _____
 SIGNATURE _____
 DATE _____

EXAMINED BY:

C. Thompson
 MASTER'S SIGNATURE

C. THOMPSON

MASTER'S NAME (PRINTED)

M. Burns
 N.C.B. SURVEYOR'S SIGNATURE

M. BURNS

N.C.B. SURVEYOR'S NAME (PRINTED)

DATE: 1 NOVEMBER 2011

NOTE: ORIGINAL STABILITY CALCULATION AND GRAIN ARRANGEMENT PLAN TO BE SUBMITTED TO THE N.C.B. SURVEYOR. ALL TONNAGES USED IN THIS CALCULATION SHALL BE SHOWN IN THE SAME UNITS AS USED IN THE GRAIN LOADING BOOKLET.

NCB Grain Stability Calculation Form Page 1

SHIP AND CARGO CALCULATION

PART I

 TYPE OF GRAIN Wheat STOWAGE FACTOR 1.198 M³/MT 43 FT³/LT

COMPT. NO.	CARGO (1)	S.F. (1)	GRAIN CUBICS (2)		WEIGHT (3)	V.C.G.	MOMENT (3)	S.F.	S.F.	DEN
			TOTAL	USED						
1	Wheat	1.198	9323	5325	4445	7.00	31115	M ³	FT ³	MT
2	↓	↓	11729		9790	9.59	93886	MT	LT	M ³
3	↓	↓	11604		9686	9.60	92986	1.171	42	0.854
4	↓	↓	10858		9063	9.56	86642	1.184	42.5	0.844
5	↓	↓	11577		9664	9.61	92871	1.198	43	0.834
6	↓	↓	7454	6125	5113	8.60	43972	1.212	43.5	0.825
								1.226	44	0.816
								1.240	44.5	0.806
								1.254	45	0.797
								1.268	45.5	0.789
								1.282	46	0.780
								1.296	46.5	0.772
								1.310	47	0.763
								1.324	47.5	0.755
								1.338	48	0.747
								1.352	48.5	0.740
								1.366	49	0.732
								1.380	49.5	0.725
								1.393	50	0.718
								1.407	50.5	0.711
								1.421	51	0.704
								1.435	51.5	0.697
								1.449	52	0.690
								1.477	53	0.677
								1.505	54	0.664
								1.533	55	0.652
								1.561	56	0.641
								1.589	57	0.629
								1.616	58	0.619
								1.644	59	0.608
								1.672	60	0.598
								1.700	61	0.588
								1.728	62	0.579

THIS CALCULATION IS PREPARED IN:	CARGO TOTALS	47761		441472
<input checked="" type="checkbox"/> METRIC UNITS	LIGHT SHIP	9066	11.11	100723
<input type="checkbox"/> ENGLISH UNITS	CONSTANT	276	13.82	3814

SHIP AND CARGO TOTALS	57103	546009
-----------------------	-------	--------

- (1) COMPLETE THESE COLUMNS IF MORE THAN ONE TYPE OF CARGO IS LOADED.
 (2) FOR PARTLY FILLED COMPARTMENTS, SHOW THE CUBICS USED IN ADDITION TO THE TOTAL CUBICS.
 (3) WEIGHTS AND MOMENTS SHOULD BE SHOWN TO THE NEAREST WHOLE UNIT.

CARGO PLAN: INDICATE HOLDS, TWEEN DECKS, ENGINE SPACES, FITTINGS, STOWAGE, TONNAGES, ETC.

PF	F-UT	F-UT	F-UT	F-UT	F-UT	PF
5113 mt	9664 mt	9063 mt	9686 mt	9790 mt	4445 mt	
6	5	4	3	2	1	

NCB Grain Stability Calculation Form Page 2

NCB Grain Stability Calculation Form Page 3

FUEL AND WATER CALCULATION

PART II

THE **INTERMEDIATE** SECTION MUST BE COMPLETED IF THE **ARRIVAL** SECTION SHOWS BALLAST THAT IS NOT LISTED IN THE **DEPARTURE** SECTION. THE **INTERMEDIATE** CONDITION IS IMMEDIATELY BEFORE BALLASTING AND MUST INCLUDE THE EFFECT OF FREE SURFACE, BUT **NOT** THE EFFECT OF ADDED WEIGHT. ADDITIONAL FUEL TAKEN AFTER DEPARTURE MUST BE SHOWN IN THE **INTERMEDIATE** SECTION IN THE SAME MANNER AS BALLAST.

DEPARTURE: Norfolk						INTERMEDIATE: Balboa				ARRIVAL: Dahlian			
TANK	TYPE LIQUID	WEIGHT	V.C.G.	MOMENT	F.S. MOM.	WEIGHT	V.C.G.	MOMENT	F.S. MOM.	WEIGHT	V.C.G.	MOMENT	F.S. MOM.
FOT 1P	FO	100	11.80	1180	196	100	11.80	1180	196	50	11.80	590	196
FOT 2P	FO	200	9.90	1980	157	106	9.90	1049	157	106	9.90	1049	157
FOT 3P	FO	200	9.91	1982	157	105	9.91	1041	157	107	9.91	1060	157
FOT 4S	FO	100	11.79	1179	196	100	11.79	1179	196	50	11.79	590	196
DOT 1P	DO	25	15.18	380	8	25	15.18	380	8	25	15.18	380	8
DOT 1S	DO	25	15.18	380	8	25	15.18	380	8	25	15.18	380	8
DOT 2S	DO	40	13.74	550	123	27	13.74	371	123	74	13.74	1017	123
FWT P	FW	75	15.36	1152	145	75	15.36	1152	145	75	15.36	1152	145
FWT S	FW	75	15.34	1151	166	75	15.34	1151	166	75	15.34	1151	166
Ballast	BW	100	1.51	151	-	100	1.51	151	-	100	1.51	151	-

Max. VCGs have been used throughout. Actuals would be acceptable

Max. FSMs have been used throughout. Actuals would be acceptable provided maximums used for largest pair of each type of tanks

TOTALS

LIQUIDS	940	10085	1156	738	8034	1156	687	7520	1156
SHIP AND CARGO	57103	546009	57103	546009	57103	546009	57103	546009	
DISPLACEMENT	58043	556094	57841	554043	57790	553529			
SAILING DRAFT	11.91	AT DENSITY	1.011						

DEPARTURE KG	9.58	INTERMEDIATE KG	9.58	ARRIVAL KG	9.58
(1) FREE SURFACE CORR. (+)	0.02	(1) FREE SURFACE CORR. (+)	0.02	(1) FREE SURFACE CORR. (+)	0.02
(2) VERT. S.M. CORR. (+)	-	(2) VERT. S.M. CORR. (+)	-	(2) VERT. S.M. CORR. (+)	-
DEPARTURE KG _v	9.60	INTERMEDIATE KG _v	9.60	ARRIVAL KG _v	9.60
DEPARTURE KM	13.35	INTERMEDIATE KM	13.35	ARRIVAL KM	13.36
DEPARTURE KG _v	9.60	INTERMEDIATE KG _v	9.60	ARRIVAL KG _v	9.60
DEPARTURE GM	3.75	INTERMEDIATE GM	3.75	ARRIVAL GM	3.76
REQUIRED MINIMUM GM	0.30	REQUIRED MINIMUM GM	0.30	REQUIRED MINIMUM GM	0.30

(1) FREE SURFACE CORR. = $\frac{\text{SUM OF FREE SURFACE MOMENTS}}{\text{DISPLACEMENT}}$

(THIS CORRECTION MUST BE APPLIED TO ALL SHIPS.)

(2) VERT. S.M. CORR. = $\frac{\text{SUM OF VERTICAL SHIFTING MOMENTS}}{\text{DISPLACEMENT}}$

(THIS CORRECTION APPLIES WHEN THE VOLUMETRIC HEELING MOMENT CURVES OR TABLES DO NOT SPECIFICALLY STATE THAT THE CORRECTION FOR THE RISE IN VERTICAL CENTER OF GRAVITY HAS BEEN INCLUDED, AND THE MANUAL PROVIDES VERTICAL SHIFTING MOMENTS.)

NCB Grain Stability Calculation Form Page 4

HEELING MOMENT CALCULATION

PART III

COMPT. NO	STOWAGE (1)	GRAIN ULLAGE OR DENSITY	VOLUMETRIC HEELING MOMENT	S.F. OR DENSITY (2)	GRAIN HEELING MOMENT	VERTICAL SHIFTING MOMENT (IF PROVIDED) SEE NOTE 2 IN PART II	
		M/T	M ³ /FT		MT-M ³ /FT-LT	M ³ /FT ⁴	MT-M ³ /FT-LT
1	PF	8.46	13771	1.198	(12295.2 x 1.12)		
2	F-UT	0	3730				
3	F-UT	0	3880				
4	F-UT	0	3799				
5	F-UT	0	3840				
6	PF	4.15	9598		(8569.9 x 1.12)		
				1.198			
TOTALS			38618		32235		

(1) UNDER STOWAGE INDICATE "F-T" FOR FILLED COMPARTMENTS TRIMMED, "F-UT" FOR FILLED COMPARTMENTS UNTRIMMED, "PF" FOR PARTLY FILLED COMPARTMENTS, AND "SEC" FOR SECURED OR OVER-STOWED COMPARTMENTS.

(2) THE STOWAGE FACTOR USED IN PART III SHALL NOT EXCEED THE ONE BASED ON THE WEIGHT PER UNIT OF VOLUME (TEST WEIGHT) OF THE GRAIN. IF THE STOWAGE FACTOR IS THE SAME IN ALL COMPARTMENTS, DIVIDE THE TOTAL VOLUMETRIC HEELING MOMENT BY THE STOWAGE FACTOR OR MULTIPLY BY THE DENSITY TO OBTAIN THE GRAIN HEELING MOMENT. IF THE STOWAGE FACTOR VARIES, OBTAIN THE GRAIN HEELING MOMENT FOR EACH COMPARTMENT.

INTERNATIONAL GRAIN CODE, Part A, 7.1

REGULATION 4, CHAPTER VI, SOLAS 1974 or

REGULATION 4, IMCO RESOLUTION A.264(VIII), NEW CHAPTER VI, SOLAS 1960

REGULATION 4, IMCO RESOLUTION A.184 AN EQUIVALENT TO CHAPTER VI, SOLAS 1960

A. FOR VESSELS APPROVED UNDER

STABILITY SUMMARY

	DEPARTURE	INTERMEDIATE	ARRIVAL
DISPLACEMENT	58043	57841	57790
KG OR CM	9.60	9.60	9.60
TOTAL GRAIN HEELING MOMENT	32235	32235	32235
MAXIMUM ALLOWABLE HEELING MOMENT	50846	50672	50628
* ANGLE OF HEEL (12° MAX.)			
0.075 METER-RADIANS			
* RESIDUAL AREA (14.1 FT ² OR 4.3 M ²) MINIMUM			
* GM (0.3M OR 1 FT MINIMUM)			

* TO BE COMPLETED IF VESSEL'S GRAIN LOADING BOOKLET DOES NOT INCLUDE A TABLE OF ALLOWABLE HEELING MOMENTS. IN SUCH CASE, STATICAL STABILITY DIAGRAMS DEMONSTRATING THIS INFORMATION SHALL BE ATTACHED HERETO.

B. FOR SPECIALLY SUITABLE SHIPS APPROVED UNDER

INTERNATIONAL GRAIN CODE, PART A, 8.2

SECTION V (B), PART B, CHAPTER VI, SOLAS 1974

SECTION V (B), PART B, IMCO RESOLUTION A.264 (VIII), NEW CHAPTER VI, SOLAS 1960

REGULATION 12, CHAPTER VI, SOLAS 1960

ANGLE OF HEEL = $\frac{\text{GRAIN HEELING MOMENT} \times 57.3}{\text{DISPLACEMENT} \times \text{GM}}$

	DEPARTURE	INTERMEDIATE	ARRIVAL
TOTAL GRAIN HEELING MOMENT			
DISPLACEMENT			
GM			
ANGLE OF HEEL (5° MAX.)			

NCB and Federal Agency Relationship

- 7CFR 1499.6: Food for Progress Programs – ***Certificate of Readiness and Certificate of Loading***
- 7CFR 1599.6: International Food for Education and Child Nutrition Program - ***Certificate of Readiness and Certificate of Loading***
- 19CFR 115.6: Certification for Containers
- 46CFR 31.10-16: Inspection and Certification of Cargo Gear
- 46CFR 148.12: Carriage of Solid Hazardous Materials in Bulk Assignment and Certification
- 46CFR 172.015: Document of Authorization
- 46CFR 172.040: Grain Certificate of Loading
- 49CFR 176.18: Hazardous Materials Assignment and Certification

Additional Services Provided

- Cargo Securing, Loading, and Stowage
- Volume and Weight Calculations
- Vessel Safety Inspections
- Marine Insurance and Loss Control
- National Cargo Bureau Training
- Other Cargo Related Services, for example...

Vessels Loading Bulk Cargo

IMSBC Code compliance, Draft Surveys, Hold Cleanliness inspections.



Draft Survey



Potential Consequences of poor stowage/stability



Securing of Cargo – Flat Racks



Securing of Cargo – Flat Racks

Many carriers require a NCB inspection of out of gauge cargo loaded on flat racks before the unit is accepted for loading.



Elephant in Union Square



Elephant on a flat rack

Loading / Discharging, Securing of Cargo – Break Bulk and Project Cargo



Flag State Safety Inspections, Vessel Pre-purchase and condition surveys

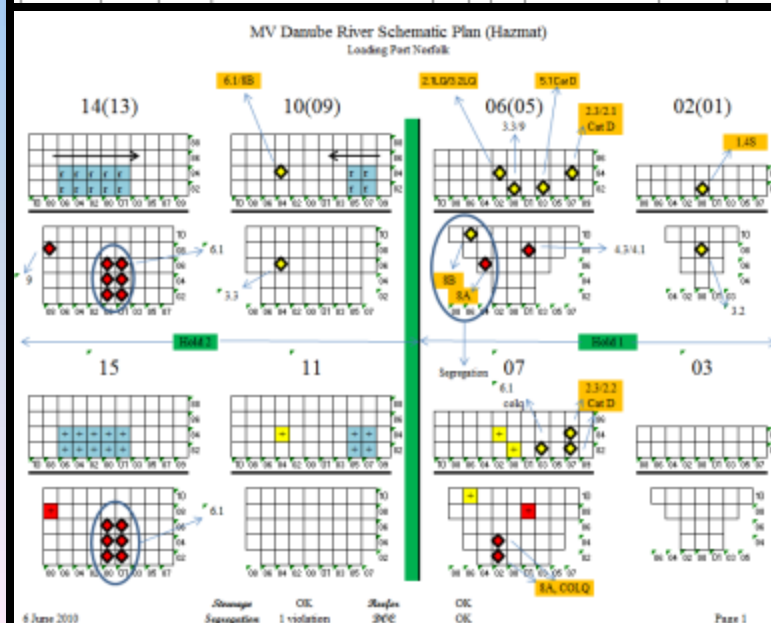



Damaged cargo, vessel and facility Surveys



DCM and Stow Plan Reviews

Dangerous Cargo Manifest								
Vessel	MV Danube River		Voyage	42E11	Prepared by	EW		
Flag	Hamburg		Port of Loading	USORF	Master			
Official Nr.	9193317		Port of Discharge	FRLHV	Date	6/5/2010		
Container No.	Packaging Weight	UN	Proper Shipping Name	Class	PG	FP	Additional Information	Storage
ENFU 233456-0	1 Tank 24000 KG	UN1993	Flammable Liquid NOS (Isopropylalcohol)	3	III	10C	Emerg # 800-727-2300	09-00-10
TTNU 987123-9	10 Drums 17800 KG	UN2992	Carbamate Pesticide Liquid Toxic (Carbofuran 96%)	6.1	II	-	Marine Pollutant Emerg # 800-727-2300	10-02-10
GEDU 665588-9	5 Cyl 250 KG	UN1008	Boron Trifluoride	2.3(8)	I	-	Emerg # 800-727-2300	10-00-82
BLKU 543789-0	1 Tank 24000 KG	UN3064	Alcoholic Beverages (bourbon)	3	III	24C	Emerg # 800-727-2300	09-01-10
NCBU 323354-6	5 Cans 250KG	UN3066	Paint	3	II	14C	Emerg # 800-727-2300 LTD QTY	02-02-82
	10 Drums 150 KG	UN1824	Sodium Hydroxide Solution	6.1	II	-	Emerg # 800-727-2300	
	20 Drums 145 KG	UN1789	Hydrochloric Acid	8	III	27C	Emerg # 800-727-2300	





Eingegangen
 21. März 2003
 2830 Ladungsservice

Bundesrepublik Deutschland
 Federal Republic of Germany

BESCHEINIGUNG¹
BESONDERE VORSCHRIFTEN FÜR SCHIFFE,
DIE GEFÄHRLICHE GÜTER BEFÖRDERN

Document of Compliance¹
Special Requirements for Ships Carrying Dangerous Goods

Ausgestellt im Namen der Regierung der
BUNDESREPUBLIK DEUTSCHLAND durch die SEE-BERUFGSGENOSSENSCHAFT
 nach den Vorschriften der Regel II-2/19.4
 des INTERNATIONALEN ÜBEREINKOMMENS VON 1974
 ZUM SCHUTZ DES MENSCHLICHEN LEBENS AUF SEE in seiner jeweils gültigen Fassung

Issued under the authority of the Government of the
FEDERAL REPUBLIC OF GERMANY by SEE-BERUFGSGENOSSENSCHAFT
in pursuance of the requirements of regulation II-2/19.4
of the INTERNATIONAL CONVENTION FOR SAFETY OF LIFE AT SEA, 1974, as amended

Name des Schiffes **BERLIN EXPRESS**
 Name of ship

Unterscheidungszeichen **D G H X**
 Distinctive number or letters

Heimathafen **Hamburg**
 Port of registry

Schiffstyp **Frachtschiff/Cargo Ship**
 Ship type

IMO-Nummer **9229855**
 IMO Number

Datum, an dem der Kiel gelegt wurde oder das Schiff
 sich in einem entsprechenden Bauzustand befand **27.06.2002**
 Date on which keel was laid or ship was at a similar stage
 of construction

Datum, an dem ein Umbau oder eine Änderung
 oder eine Veränderung größerer Art begonnen wurde
 Date on which work for a conversion or an alteration or
 modification of a major character was commenced

1. Diese Bescheinigung entspricht dem Rundschreiben MSC/Circ. 1027 der Internationalen
 Seeschiffahrtsorganisation

1. This document of compliance is in accordance with MSC/Circ. 1027 of the International Maritime
 Organization (IMO)

Verantwortliche Stelle
 Für die Bescheinigung

Potential Consequences of improper stowage and segregation of hazardous

MV Hyundai Fortune on fire



Container Inspection Statistics

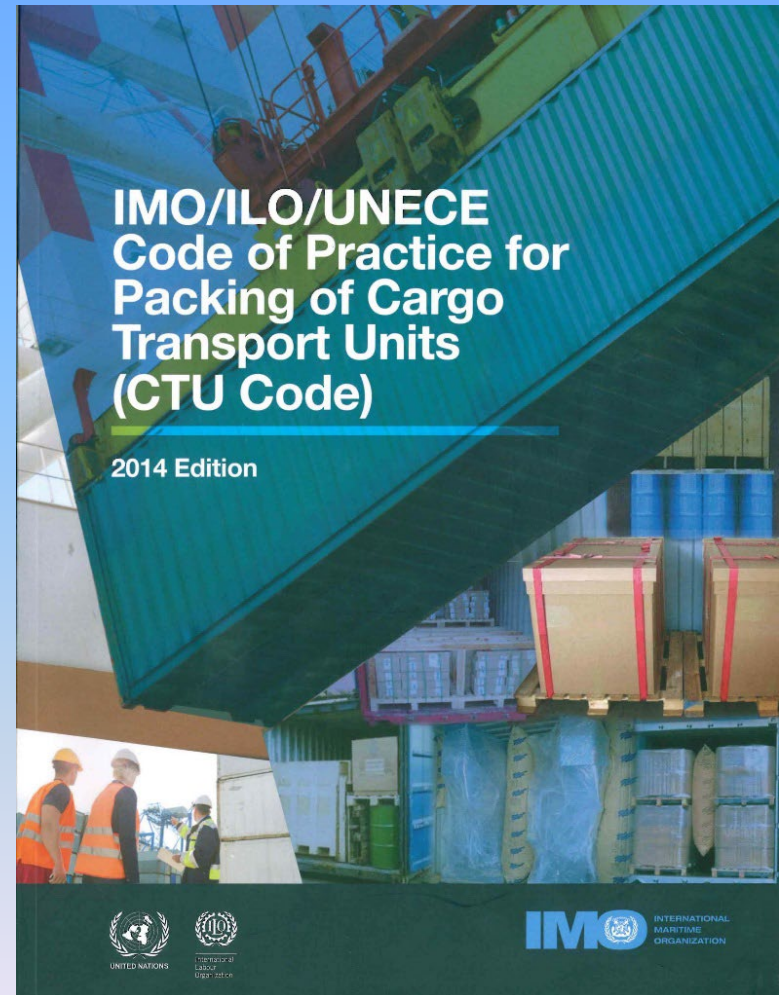
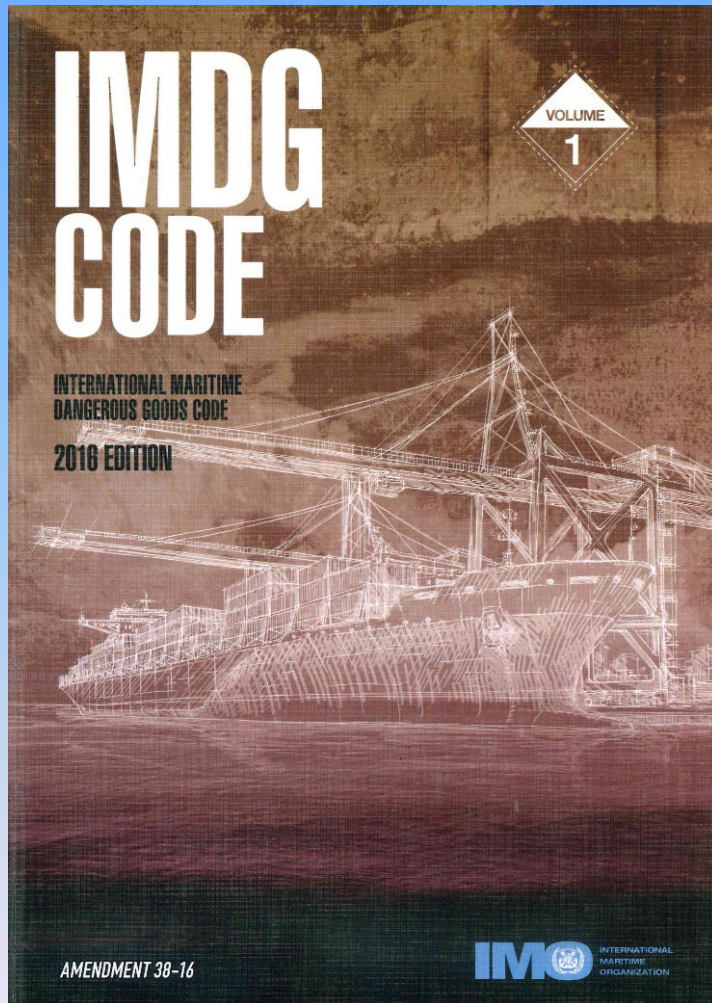
- Each year NCB inspects over 20,000 Hazmat Containers
- NCB annual container inspections are combined with the USCG inspections for annual reporting to IMO/CCC



Container Inspection Weight Distribution



Regulations



Container Inspection Cargo Securing



Container Inspection Cargo Securing



Container Inspection Cargo Securing



Container Inspection Cargo Securing



No Cargo Securing



Cargo Securing is inadequate at the rear of the load plus there is cargo adrift between the load and the doors

Container Inspection Cargo Securing



**Cargo Securing is inadequate.
Cylinders have fallen over or are
adrift.**



**Load bars – not approved for use
with DG cargo**

Container Inspection Cargo Securing



Cargo Securing is inadequate. Cargo has tilted or fallen over on its side.

Container Inspection Cargo Securing



No Cargo Securing at the rear of the load.



Flexible Restraint system loose

Container Inspection Cargo Securing



No Cargo Securing at the rear of the load.

Container Inspection Cargo Securing



Improperly applied flexible restraint system.



No Cargo Securing at the rear of the load.

Container Inspection Cargo Securing



Failed Securing at the rear of the load.

Container Inspection

Cargo Segregation



Class 2.1 and 5.1 are not permitted in the same container per General Segregation.

Container Inspection - Placarding and Marking



Container Inspection

Potential Consequences



Lack of Container Inspection Potential Consequences



MV Hyundai Fortune
on fire

Lack of Container Inspection Potential Consequences



MV Hyundai Fortune on fire

Lack of Container Inspection Potential Consequences

MV Hanjin Philadelphia explosion



Lack of Container Inspection Potential Consequences



MV Hanjin Philadelphia “The Aftermath”



CONTAINER INSPECTION SAFETY INITIATIVE



Initiative Background

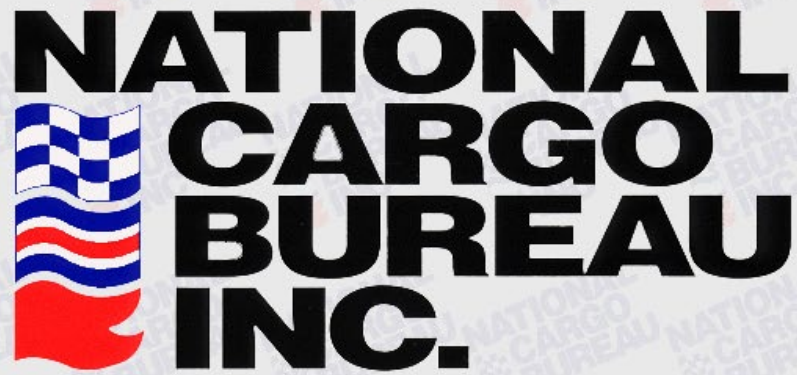


- On March 6, 2018 a explosion caused a fire onboard the 15,226 TEU MAERSK HONAM.
- In the aftermath, Maersk contacted NCB to inspect 100 inbound containers.
- To collect more meaningful data, NCB offered 500 container inspections to the 5 board members of CINS
- To promote our not-for-profit mission of Safety of Life and Cargo at Sea, NCB offered these 500 inspections free of charge.

Deadly container ship fires finally spurring carrier action

“Another outgrowth of the Honam disaster was the creation of a Container Inspection Safety Initiative by the New York-based National Cargo Bureau. It will provide free inspection of inbound containers to the United States from locations where inspections aren’t performed. It will allow for the collection of data that will be used to analyze in order to promote safety.





...Safety of Life
and Cargo at Sea...

National Cargo Bureau , Inc.
180 Maiden Lane
New York, NY 10038

www.natcargo.org