

Natural Disaster Planning & Recovery

David Glynn and Kay Freeman

Northrop Grumman Ship Systems

August 29, 2005

Hurricane Katrina released her fury on the Pascagoula shipyard leaving behind

- Unprecedented devastation
- A mountain of debris
- A determined group of people

August 29, 2005

- **Members of senior management, homeless**
- **1000's of employees, homeless**
- **Every building except the Administration Building, flooded**
- **Every piece of rolling stock underwater**
- **Electrical grid, un-repairable**
- **Sewage system, inoperable**
- **Drinking water plants, inoperable**

August 30, 2005

- **Computer Center, gutted**
- **HR building, gutted**
- **East Bank Buildings, gutted**
- **Production shops, flooded**
- **Production equipment, inoperable**
- **My office, 40” of water**
- **Indoor plumbing, none**

August 30, 2005

- **Resource Recovery Office, gone**
- **Portable buildings, wrecked**
- **Office trailers, overturned**
- **Equipment, wet, rusting, inoperable**
- **Tools, wet and rusting**
- **Records/files, wet**

August 30, 2005

- **Phones, wet, inoperable**
- **Cells, inoperable**
- **Computers/servers, inoperable**
- **Office supplies, wet**
- **Pens/pencils, unavailable**
- **Office furniture, wet, rusting, unusable**

August 30, 2005

Recovery Crew Assembled

- Shipyard workers
- Contractors
- Navy personnel

August 30, 2005

The tasks:

- **Remove and dispose of a Mountain of waste**
- **Rebuild a shipyard**

August 30, 2005

Our Resource Recovery team was on the job early Tuesday morning securing resources and services needed to move the mountain of debris from the shipyard to disposal sites.

August 31, 2005

- I moved aside
- Let them do what they do best

Super Heroes

The daunting task to manage disposal of this incredible quantity of waste fell to Resource Recovery, Environmental Engineering, and Scrap Sales personnel

Super Heroes

In the days after Katrina they worked 24/7's to:

- Schedule trucks
- Coordinate services
- Separate wastes in accordance with regulations
- keep records of each load of waste
- Ensure that each load went to the correct destination

SUPER HEROES



Resource Recovery Team including employees from Resource Recovery, Scrap Sales, Transportation, and Labor Departments. From Left to Right: Charles English, Dana Wescovich, Darwin Pettaway, Victor Odom, Leo Lovelace, Brenda Hoskins, Chad Thomas, Charles Finklea, Labarron Peoples, Mike Porter, John Biggs, Top: Jacky Robinson. Not pictured Ramon James and Myron Thompson.

NORTHROP GRUMMAN AIRCRAFT SYSTEMS INGALLS OPERATIONS

K&I

LEIBNER

LEIBNER



By mid November

- **3,475 truck loads of debris had been sent to local landfills.**

If you could line all those truck loads up in a single line, it would stretch the entire length of the sandy beaches along Mississippi gulf coast.

By mid November

- **over 1.2 million gallons (242 tanker truck loads) of oily wastewater from shipyard cleanup activities were collected and shipped off site for treatment.**

If you added those trucks to the line of trucks hauling debris, the line would stretch from Pascagoula Mississippi to Mobile Alabama.

By June 2006

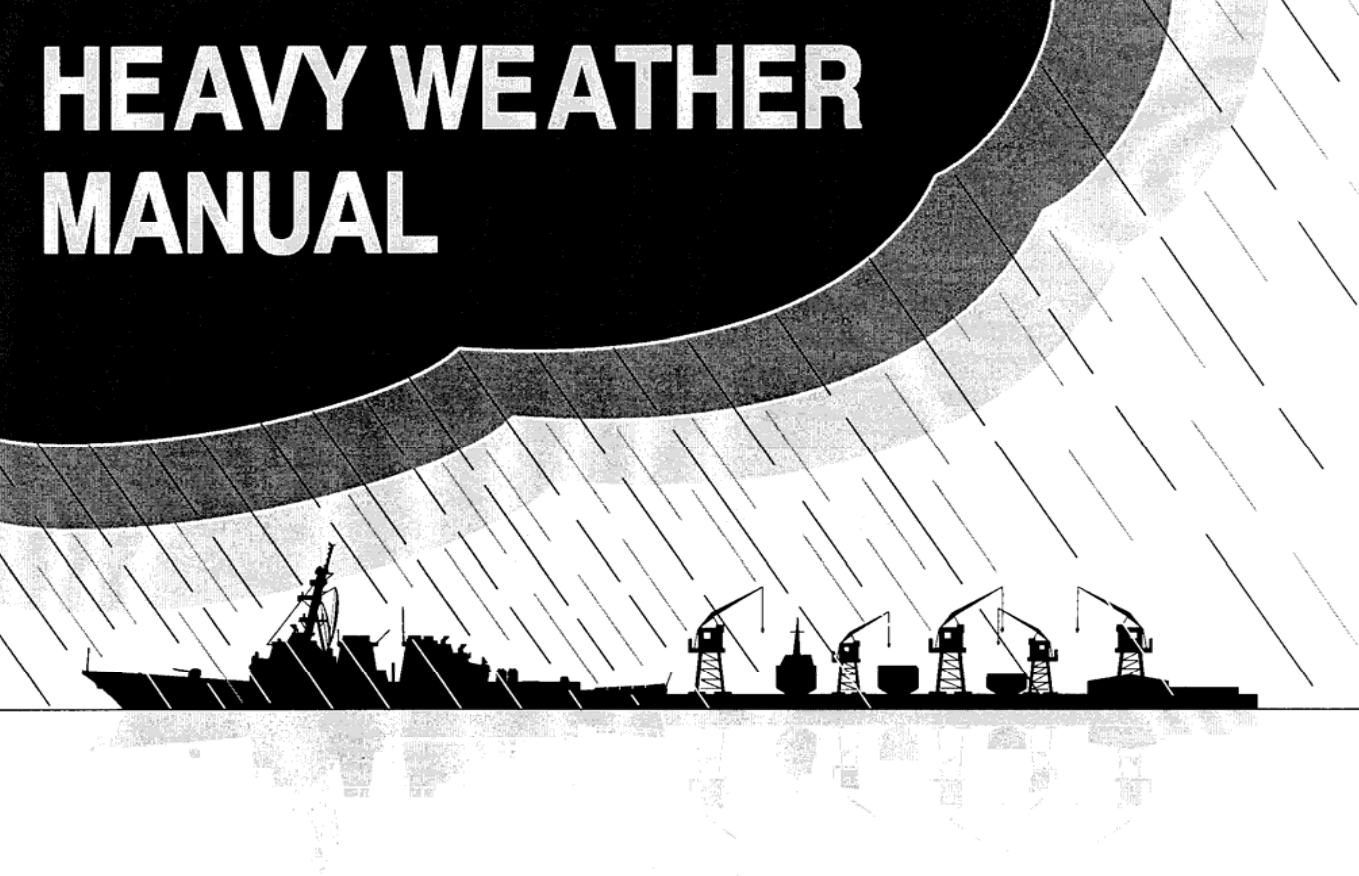
Other wastes shipped in large quantities

- E-scrap – 208,000 lbs
- Wet documents-2,000,000 lbs
- Sensitive documents – 300,000 lbs
- Hazardous wastes - \$1,000,000
- Small Freon containing items – 500 cu yds

Today

- **East Bank in ruins**
- **West Bank clean**
- **Insurance negotiations continue**
- **Buildings and shops being restored**
- **Tools and equipment being replaced**
- **We are building ships**
- **Heavy Weather Manuals 2006 ready**
- **Heavy Weather Recovery Plans ready**

HEAVY WEATHER MANUAL



Heavy Weather Manual

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- **Hurricane Facts**
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 - Pascagoula
- **SSG M1000N – Hazardous Materials Temporary Storage**
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 - Pascagoula, East Bank
 - Pascagoula – West Bank
- **Distribution – Heavy Weather Manual**

Area Chairmen, Example

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SSG M1000G
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06/01/06

NOTE: Phone numbers need to be verified & updated during storm mobilization

SSG M1000G - Hurricane Preparation Organization (AREA CHAIRMEN)

GENERAL COMMITTEE

CHAIRMAN – G. R. Yount, Vice President Operations
(504) 436 5000/(504) 391-0181/(504) 616-5502

Alsgood, S.	1221/818-5766	Moore, A.P.	4774/769-2716
Busch, C.	3661/435-0602	Rideout, J.	8482/251-344-7642
Bruno, J. S.	3247/327-3464	Robinson, H.E.	4972/251-635-1621
Carroll, M.S.	5837/872-5799	Saucier D. E.	1368/762-7441
Cullin, B. P.	1690/202-436-2725	Schenk, R.S.	4703/875-4668
Cuccias, B.J.	8474/251-602-5288	Spiker, R.B.	5112/522-0408
Delarosa, R.E.	5131/762-8673	Strom, S.H.	5339/504-394-0623
English, L. J.	3763/872-2443	Womble T. E.	8626/872-9402
Fontaine, D.L.	2744/475-8008	Whiddon, W.D.	5079/504-227--0465
Fortenberry, A.R.	3961/497-2410	Williams, D.T.	5311/872-2427
Haygood, J.R.	7481/769-6845		
Hughes, E. E.	1025/327-7286		
Merchant, R.L.	1055/497-9619		

EMERGENCY DIRECTOR

D. E. Saucier x1368
1108 Pascagoula St. 228-762-7441
Pascagoula, MS 327-0952

ASSISTANT EMERGENCY DIRECTOR

L. J. English x3763
6104 Washington Ave. 228-872-2443
Ocean Springs, MS 327-0964

ASSOCIATE EMERGENCY DIRECTOR

J. A. Walley, Jr. x3575
1131 Will Howell Rd. 601-947-8629
Lucedale, MS 366-6830

CRANE CONTROL CENTER

C. W. Malone x2261
7404 Caraway Rd. 228-588-6289
Moss Point, MS 366-6984

NOTE: 210 = Pager Numbers
327/366 = Cell Phone Numbers

Continued on next page

ORTHROP GRUMMAN

Area Chairmen, Example

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SSG M1000G - Hurricane Preparation Organization (AREA CHAIRMEN), Continued

PASCAGOULA - WEST BANK, Continued

FLEET SUPPORT OPERATIONS (FSO)

W. E. Graham X5487
P. O. Box 425 228-475-4791
Escatawpa, MS 210-1860

HAZARDOUS MATERIAL/WASTE E/W

E. K. Freeman x3919
17708 Riverwalk Dr. 228-826-2744
Vanceleave, MS 366-6848

HULL SHOPS W/B

H. D. Weaver x4840
4200 Blue Fish Ave. 228-769-5018
Pascagoula, MS 327-2539

OUTFITTING HALL

M. J. Washington x1671
4024 Earl Blvd. 228-475-9389
Moss Point, MS 327-4101

HUMAN RESOURCES BLDG/SUBC TRLRs

A. L. Logan x4762
8307 Pine Cone Dr. 228-497-9930
Gautier, MS 327-7565

LBTF BUILDING

C. F. Marshall x5951
6708 Elder Ferry Rd. 228-475-9428
Moss Point, MS 327-2251

MAINTENANCE/UTILITIES W/B

G. T. Hillman x5719
3670 Jakes Hill Road 601-947-7187
Lucedale, MS 366-0243

MATL STORAGE/OPS WEST/IPS AREAS

J. E. Williams x3578
615 Clark Ave. 228-875-4217
Ocean Springs, MS 327-4805

METAL PROCESSING FACILITY/BLAST & PAINT HALL

L. C. Turner x5258
3218 Scovel Rd. 228-762-7941
Pascagoula, MS 327-2565

PC CENTRAL/OPS ADM BLDG.

T. L. Leonard x3953
14975 Big Ridge Rd. 228-392-5943
Biloxi, MS 327-2253

PRE-LAUNCH/ /BAY AREAS

G. D. Davidson x3282
21600 John Holder Rd. 228-588-9395
Moss Point, MS 327-1281

QUALITY E/W

W. D. Phillips x5810
3612 Mercier Dr. 228-762-5892
Pascagoula, MS 366-1936

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SSG M1000J – HEAVY WEATHER TASK MATRIX, Continued

HAZARDOUS MATERIAL/WASTE

DATE: 1 JUNE 06

SHIP, BUILDING, OR AREA: ALL AREAS OF YARD		SECTION: ENVIRONMENTAL/RESOURCE RECOVERY						
INCLUDES: ALL AREAS HAVING HAZARDOUS MATERIAL/WASTE		LOCATION: EAST AND WEST BANK						
Coordinator: Mark E. Ross, x6417/366-6097		AREA CHAIRMAN: E. K. FREEMAN 366-6848						
		TITLE: ENVIRO MGR						
		PHONE: X3919						
TASK	PRE- JUNNOV	ALERT STATUS				POST	REMARKS	TASK COMPLETED DATE
		III	II	I	I			
1. Make arrangements for transportation of hazardous waste from shipyard.	X						<u>COORDINATION:</u> Transportation E/B x4145 Transportation W/B x3238 Resource Recovery x5801	
2. Remove all hazardous waste from shipyard or move waste to designated area if conditions deteriorate quickly preventing shipment off-site.		X					When tropical storm or hurricane is within a 1,200-mile radius of shipyard.	
3. Notify Area Chairmen and Transportation to move hazardous material to safe storage or secure LAW Hazardous Material Supplemental Manual.			X				When tropical storm or hurricane is within a 1,200-mile radius of shipyard or Alert status III	
4. Ensure all dockside tanks are empty and disconnected from power and dockside piping prior to being moved.			X					
5. Evaluate hazardous material/waste and petroleum products/waste and notify NRC of any release.							NRC 1-800-424-8802	
6. Notify Area Chairmen and Transportation to return hazardous material to production areas after ALL CLEAR is announced or after recovery status permits.						X		
<u>RESOURCE RECOVERY</u>							<u>ENVIRONMENTAL ENGINEERS:</u> <u>PASCAGOULA</u>	
C. E. English DC# 24	x5801/588-3926/366-6054						J. Floyd x2770/872-1759/ 366-6078 DC# 48	
L. Lovelace DC# 46	x5678/539-5900/366-6076						J. M. Becker x5824/217-0040/ 366-0802 DC# 5	
C. Thomas DC# 284	x8619/218-5565/366-6315						H. P. Williamson x5255/251-580- 3866/ 366-6113 DC# 83 x8027/243-2672/ 366-6218 DC# 187	
							M. Ross x6417/875-9088 366-6097 DC# 67	
							<u>Gulfport</u> B. L. McVey x7757/875-6275/ 327-1548 DC# 647	

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Heavy Weather Recovery Plan

NORTHROP GRUMMAN	
SHIP SYSTEMS SUPPLEMENTAL GUIDANCE	
Subject:	Heavy Weather Recovery Plan
	Sector
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SSG NO.	M1006
PAGE	1 of 48
DATE	06/21/06
SUPERSEDES	See Below
REVISION	*Denotes

Supersedes: SSG M1006, Heavy Weather Recovery Plan, 06/01/06

Purpose This document describes the responsibilities of organizations for the recovery of the facility and production capability following a storm or other severe weather to the area. This Supplemental Guidance is to be implemented immediately after the storm has passed and any floodwaters affecting the facility have receded thereby allowing safe access by essential personnel to aid in the assessment and/or recovery of ships, equipment, plant property, and personnel.

This document provides the plan for recovery operations after a heavy weather event. The first post-storm day is used to assess damage. Based on the extent of damage, one of three recovery conditions is declared. Actions for the selected recovery condition are then implemented.

Three recovery crews are also pre-arranged and brought in to support the recovery condition selected.

Target Audience This Supplemental Guidance is designed for application at the Northrop Grumman Ship Systems sites Pascagoula, New Orleans, and Gulfport, Operations.

Definitions The following is a list of definitions for this Supplemental Guidance:

- Recovery – Actions and processes required to bring the facility back to operation after a heavy weather event.
- Heavy Weather - Adverse weather conditions that could seriously affect the operation of a ship systems site.
- Storm Recovery Center (SRC) – The SRC is the command and control element that serves as the central coordination point during the recovery operations. The SRC is the primary focal point for establishing recovery priorities and maintaining communications with customers, senior management, and external agencies.

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Heavy Weather Recovery Plan

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• Transportation	
• Trades	
• Ops Administration	
• Damage Assessment Team (DAT)	
• Facilities and Maintenance Director	
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Heavy Weather Recovery Plan

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Attachment SSG M1006A-Pre Storm Recovery Checklist

RECOVERY CHECKLIST			
	ACTION	BY	Pre-Storm
1	In charge of recovery effort	Recovery Director	X
11	Provide all notifications to employees, including updating employee information lines	EAT	X
12	Provide all media relations	EAT	X
13	Develop press releases and obtain SRC approval	EAT	X
14	Establish and operate Offsite Control Center	EAT	X
16	Update of the employee web site	EAT	X
18	Pre-hurricane season communications campaign	EAT	X
19	Employee call back to work notification	EAT	X
21	Print and distribute payroll	Finance	X
24	Arrange for service/equipment supply agreements to be in place prior to storm and activate on an as needed basis during recovery phase.	Sustainment Dir.	X
28	Assure availability of post storm supplies	Mar'l	X
29	Distribute/stage critical lubricants and preservatives	Mar'l	X
32	Select clean up area breakdowns	CUT	X
50	Develop personal tool inventory plan and reclamation process	Trades	X
56	Download employee lists prior to storm	Ops Adm	X
78	Establish offsite parking for watch standers, arrange busing.	Facil Dir	X
100	Verify all personnel who remained at the shipyard are accounted for and safe.	Security	X
107	Issue emergency response placards	Security	X
110	Provide alternate employee identification plan	Security	X
112	Maintain E-mail services	IT	X
113	Pre-stage assets remotely and bring on-site after storm	IT	X
114	Procure and distribute supplemental communications equipment as required by the SRC.	IT	X
115	Provide support to priorities provided by Recovery Director	IT	X
118	<u>Team Reporting</u>		
119	a. Watch Standers		X

Attachment SSG M1006B-Post Storm Day 1 Recovery Checklist

	RECOVERY CHECKLIST ACTION	BY	RECOVERY CONDITION POST STORM Day 1
1	In charge of recovery effort	Recovery Director	X
2	Establish recovery priorities and plan; assign responsibilities	Recovery Director	X
3	Develop list of long term restoration projects	Recovery Director	
4	Perform post storm yard tour	Recovery Director	X
5	Direct Offsite Command Center to collocate with SRC	Recovery Director	
6	Interface with Navy, Coast guard and Polar customers	Recovery Director	X
7	Declare recovery condition	Recovery Director	X
8	Contact customers and senior mgmt with initial damage assessment	Recovery Director	X
9	Obtain daily input to post storm inspection checklist (SSF M8359).	Recovery Director	X
11	Provide all notifications to employees, including updating employee information lines	EAT	X
12	Provide all media relations	EAT	X
13	Develop press releases and obtain SRC approval	EAT	X
16	Update of the employee web site	EAT	X
19	Employee call back to work notification	EAT	X
21	Print and distribute payroll	Finance	X
24	Arrange for service/equipment supply agreements to be in place prior to storm and activate on an as needed basis during recovery phase.	Sustainment Dir.	X
28	Assure availability of post storm supplies	Mat'l	X
31	Manage storm damage cleanup	CUT	X
32	Select clean up area breakdowns	CUT	X
34	Determine personnel required for cleanup	CUT	X
35	Coordinate with DAT that all damage documented	CUT	X
38	Clear helo pad for flight operations	CUT	X
39	Establish clean up priorities	CUT	X
50	Develop personal tool inventory plan and reclamation process	Trades	X
57	Distribute time charging information for post storm charging	Ops Adm	X

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Famous Quote

“We build ships....Nothing stands in our way.”
Ron Elias