

**INVESTIGATION REPORT ON THE FIRE ON  
BOARD OF MV "SUPERFERRY 14"**

**I. BACKGROUND INFORMATION OF M/V "SUPERFERRY 14".**

M/V "SUPERFERRY 14" owned and operated by Aboitiz Jebsen Bulk transport Corp./ WG&A Jebsen's Shipmanagement Inc. with a business address at 2<sup>nd</sup> Floor, Harbor Center II Building Railroad & Chicago Streets South Harbor, Port Harbor Manila, Philippines, was granted a Certificate of Public Convenience (CPC) issued on October 10, 2003 and valid until March 13, 2004 and authorized to operate on the route Manila - Iloilo - Cagayan - Bacolod - Manila - Bacolod - Cagayan - Iloilo - Manila and vice versa. The vessel particulars and documents required for a Philippine registered vessel are as follows;

**A. VESSEL'S PARTICULAR**

NAME	:	MV SEPERFERRY 14
FORMER NAME	:	M/V White Sanpo-2
OFFICIAL NUMBER	:	CEB1005004
CALL SIGN	:	DUNB-4
SHIP STATION LICENSE NO.	:	MS-6761-03
PORT OF REGISTRY	:	CEBU
FLAG	:	PHILIPPINES
LENGTH	:	155.6 METERS
BREADTH	:	23.6
DEPTH	:	13.05
GROSS TONNAGE	:	10,192.27
NET TONNAGE	:	4,957.21
YEAR BUILT	:	1981
PLACE BUILT	:	JAPAN
NO. OF DECKS	:	5
NO. OF MAST	:	1
ENGINE MAKE	:	SEMT PIELSTICK
NO. OF ENGINE	:	2
NO OF CYCLE	:	4
NO. OF CYLINDER	:	18
HORSEPOWER	:	11,700 x 2 PS
PLACE LAST DRYDOCKED	:	KEPPEL SHIPYARD, CEBU CITY
DATE LAST DRYDOCKED	:	APRIL 10, 2003
NUMBER OF CREW	:	155
NO. OF PASSENGERS ALLOWED	:	1747 PASSENGERS
YEAR OF ACQUISITION	:	NOVEMBER 10, 2000

**B. VESSEL'S CERTIFICATES (photo Copies Only)**

<b>Certificate</b>	<b>Cert. License</b>	<b>Date issued</b>	<b>Expiry</b>	<b>Issuing Authority</b>
1. CERTIFICATE OF OWNERSHIP (CO)		9-12-00		MARINA
2. CERTIFICATE OF VESSEL REGISTRY (CVR)		9-12-00		MARINA
3. CERTIFICATE OF INSPECTION (CI)		4-14-03	4-9-04	PCG
4. COASTWISE LICENSE (CWL)		9-12-03	9-12-04	PCG
5. SHIP STATION LICENSE (SSL)		8-5-03	8-9-04	NTC
6. CERTIFICATE OF PUBLIC CONVINIENCE (CPC)		6-28-03	6-31-04	MARINA
7. CERTIFICATE OF ACCREDITATION UNDER MC 79		4-23-02	4-22-05	MARINA
8. CERTIFICATE OF COMPLIANCE UNDER MC 65/65-A		6-11-03	6-12-04	MARINA
9. SAFETY MANAGEMENT CERTIFICATE		11-10-1	9-9-04	ABS IN BEHALF OF THE REPUBLIC OF THE PHILIPPINES

**C. OTHER DOCUMENTS GATHERED (Photo Copies Only)**

1. CERTIFICATE OF STABILITY (Pursuant to Section 931 Chapter IX of PMMRR and Chapter II-1 of the SOLAS Convention of 1974) issued by Maritime Industrial Surveyors with Certificate No. MNL 0014 on 15

2. MARINE PROTEST filed by Capt. Cefirino L. Manzo, Master of MV SUPERFERRY 14;
3. PASSENGER INSURANCE POLICY with Policy No. GV/03-0010-00 valid from July 31, 2003 until July 30, 2004 issued by Pioneer Life Incorporated;
4. CLASS CERTIFICATE with LR No.8004210 valid from 24 September 2000 until 23 September 2005. Issued by Lloyd's Register classification;
5. PASSENGER MANIFEST submitted & certified true copy by WG&A Philippines, Inc.;

## **II. AUTHORITY**

Pursuant to the Special Order No. 121-04 series of 2004 the Chief of Complaints and Investigation Division of the Enforcement Office was designated as the team leader of the team dispatched by MARINA that will conduct an ocular investigation as to the caused of marine accident involving the MV "SUPERFERRY 14" in Mariveles, Bataan.

## **III. BACKGROUND INFORMATION OF THE FIRE INCIDENT ONBOARD M/V "SUPERFERRY 14"**

M/V "SUPERFERRY 14" left North Harbor, Manila on schedule at 11:00 pm, Thursday, February 26, 2004 with 702 passengers and 155 crew<sup>1</sup> and in charged by the Vessel Master Capt. Ceferino Manzo.

On or about 12:50 Mid-night of February 27, 2004 while the ship was in the vicinity of El Fraile near Corregidor fire broke out onboard SuperFerry 14 while in route to Bacolod and Cagayan de Oro. The Ship Master immediately mobilized the fire fighting crowd and crisis teams. Liferafts were launched and emergency procedures were handled in a safe and orderly manner.

On or about 1:20 am of February 27, 2004 (same day) the ship Master ordered the start of abandon ship procedures. The passengers were transferred to the responding (rescuing) vessels, the M/V Fortune Express, M/V Princess Ivy, fishing vessel Queen Virgie, Philippine Navy Vessel 379, Philippine Coast Guard vessels, 02, 03 35-03, 35-04 and the SF 14 sister ship, SuperFerry 9.

On or about 11:30 am of the same day WG&A has confirmed two (2) fatalities. Out of the 743 passengers 633 have been accounted by the Philippine Coast Guard. While the whereabouts of the others who may have been rescued by other responding smaller sea craft is still being

ascertained. Out of the 155 crew on board 153 have already been accounted.

Due to the foregoing incident the Office of the Honorable Administrator issued a Special Order No. 121-04 forming an investigating team headed by **Mr. Arnie F. Santiago the Chief Complaint and Investigation Division** to conduct an ocular inspection, survey, and to investigate the cause(s) of marine accident involving the subject M/V "Superferry 14".

#### **IV. INVESTIGATION PROPER**

On or about 1000 hrs of February 27, 2004 and in compliance with the Special Order issued by the Office of the Administrator our team proceeded to Mariveles, Bataan to conduct an ocular inspection or investigation/verification.

On or about 1200 hrs the team arrived at the Port of Orion, Bataan and proceeded to Mariveles, Bataan where the ill-fated vessel was towed.

On or about 1230 hrs the team arrived at Bataan Shipyard and Engineering Co. (BASECO) Mariveles, Bataan.

On or about 1245 hrs. the undersigned coordinated with Herma Shipyard management to visit the ill-fated vessel M/V Super Ferry 14. The officers in charge give an approval and pinpointed the location of the subject vessel where she was towed in a safe place by the salvor.

On or about 1300 hrs. the team hired a motor banca and proceeded to the subject vessel. The vessel was placed at the coast of Siasin, Bataan two to three kilometers off and lying on her starboard side in the shallow water. The team rounded the subject vessel and took a picture. Photocopies of the vessel in the place where it was towed are here to attach as annexes "A, B, and C" and made an integral part hereof.

On or about 0900 hrs. to 1200 hrs. of February 28, 2004 the team called up some of passenger thru cell phone and landline phone for interview regarding their experience and observations at the time of accident on board M/V Super Ferry 14. Most of the passengers are located at the tourist section. One of the passengers claimed that the ceiling of red section was detached due to explosion. The other passengers located at the orange section claimed that the door glass was broken after the effect of explosion. While some relatives of the passengers claimed that the passenger relatives were still missing and there were three passengers confirmed that they cancelled their trip.

On or about 1335 hrs the undersigned proceeded to the Board of Marine Inquiry (BMI), Philippine Coast Guard to get a copy of marine protest filed by WG&A Philippines. At the office of the BMI, LTJG Alfredo E Bautista gave me copies of Marine Protest filed by Capt. Ceferino L. Manzo, Master Mariner and 2<sup>nd</sup> Mate Rolando B. Cayone, Jr. of M/V Super Ferry 14.

On or about 0800 hrs. to 1200 hrs. of February 29, 2004 the investigating team follow up the telephone interview to the surviving passengers most of them were accommodated at business class and others were accommodated at mega value. Passengers from the business class claimed that after the explosion the designated steward assisted them to evacuate their places and they proceeded to the weather deck passing on the port side stairs and they found out that crewmen were fighting a fire. While the other passengers claimed that when they reach the weather deck there were a heavy smoke and fire near the funnel at the port side.

On or about 1300 hrs. the team proceeded to the residence of the survivors that were interviewed to submit an affidavit regarding the incident that they have experienced and observed on board M/V Super Ferry 14. (see attached affidavit of passengers)

On or about 2000 hrs the team proceeded to MARINA office and upon arrival to the office, we continued calling thru telephone to the other survivors for interview.

On or about 0830 hrs. of March 1, 2004 two (2) survivors the undersigned and submitted their self to execute their affidavit stating their experiences and observation at the time of incident on board M/V Super Ferry 14. (see attached affidavit)

On or about 0900 hrs. of March 1, 2004 the undersigned coordinated with the MARINA Record section and requested for a copy of M/V Super Ferry 14 Fire Plan and Electrical Plan. The record section gave a copy of fire plan but no file copy of electrical plan from their record.

On or about 1300 hrs. the undersigned gave an order to the team to proceed to the residence of interviewed survivors to get their affidavit of statements.

On or about 1700hrs. the team proceeded to the Philippine Coast Guard and get the updated number of survivors 611 passengers / 153 crew, missing 132 passengers / 2 crew and 1 casualty of the ill-fated vessel M/V Super Ferry 14 as of 1100h of 01 March 2004 . (see attached copy)

## **V FINDINGS/OBSERVATIONS**

Based on the General Arrangement Plan and Fire Plan of the M/V Super Ferry 14, photographs that were taken while conducting ocular investigation at the site where the subject vessel was located, interviews/inquiries and the affidavits of the survivors, and the marine protest submitted by the Captain and Second Officer of the ill-fated vessel M/V Super Ferry 14, the following findings/observations are as follows:

1. That there were traces of spilled paint at the weather deck in front of the paint store room and fan room located at the back of the port side funnel near the port side stairway (see attached photograph);
2. That there were traces of burned and spilled paint at the forward part of the portside funnel near the port side stairways; (see attached photograph)
3. Based on the Marine Protest submitted by the Master of the subject vessel paragraph 4 stated, "That at around 0030 hrs. of 27 February 2004, after the vessel had been under way for more than one hour with no untoward incident, a loud explosion suddenly shook the vessel"; (see attached copy of the Marine Protest)
4. The Master also stated from his Marine Protest paragraph 6 "That at around 0034 hrs 27 February, I advised my Radio officer to call up nearby vessels and stations within the vicinity for immediate assistance"; (see attached copy of Marine Protest)
5. Based on the Marine Protest submitted by the Second Mate of the subject vessel paragraph 4 " That at around 0030hrs on 27 February 2004 after the vessel had been underway for more than one hour with no untoward incident, a loud explosion suddenly shook the vessel in the vicinity of El Fraile near Corregidor"; (see attached Marine Protest)
6. The Second Mate also stated from his Marine Protest paragraph 5. "That I was the Watch Officer in the bridge when the explosion occurred"; (see attached Marine Protest)
7. Based on the statements submitted by the Master and the Second Officer the explosion took place on or about 0030h of February 27 2004. But based on the statement from the affidavit of the passengers the

explosion occurred on or about 0045hrs of February 27, 2004;

8. That no passengers heard any emergency alarm sounded by the bridge. Most of the passenger was advised by the designated steward to vacate their accommodation and assisted to reach the safest places after hearing the explosion;
9. Most of the passengers occupying the business class accommodation run to the weather deck and noticed that there were crews fighting the fire;
10. Other passengers who occupied the open economy section were passing the after part of the stairways going to the weather deck was prevented to back out due to heavy smoke and proceeded to the car deck;
11. That the smoke detector and sprinkler system were not activated at the time of fire incident;
12. That the fire occurred at the paint storage beside the fan room No. 3<sup>2</sup>, located at the funnel port side prior to explosion. The heated fan room causes the transmission of heat to other sidewall thru convection, that causes fire in the paint storage No. 1<sup>3</sup> of SF 14;
13. That due to heat transmission, there were accumulated hot vapors between the ceiling and weather deck;
14. The bar and electrical panel located at the lower portion of the paint room and fan room was then duly affected and when the accumulated hot vapors caused by the heat transmission thru convection and meet the ignition temperature the hot gasses/vapors caused an explosion and heavy fire occurred from the affected area;
15. The explosion that was heard by the passenger was a result of the hot vapors between the ceiling and the weather deck that give off and automatically explode and resulted to fire;
16. Due to the impact of explosion, the ceilings of the red section was detached and fall down that caused another impact to the lower deck and caused the breaking of the glass door of orange section;

17. That the said findings/observations are supported by the affidavits of the survivors, as hereby attached as annexes "D, E, F, and G" stating therein that the fire started at the top of the vessel, and upon showing to them the General Plan for recall, the survivors specifically pointed out the fan room and paint storage as the place where the fire is located and the fire fighting team of the SF 14 is concentrating during the incident;
18. That the traces of paint in the weather deck indicate that there were fire occurred in the weather deck prior the explosion at the bar counter and electrical panel portion located at the promenade deck;
19. The crew members who were fighting the fire at the weather deck was using fire hose that caused the paint to spilled in the deck instead of applying the Co2 or dry chemical for type B fire (paint);
20. That there was no heat detectors allocated for the paint room and fan room from the fire plan or either a portable fire extinguisher;
21. That the sprinkler system was manually operated;
22. That the damage control team did not conduct ocular inspection in the next deck level that was affected by heat transmission and applying a cooling system;
23. That there was no bomb or explosive materials with in the area of explosion.

## VI. CONCLUSION

Based on the above findings/observation thru ocular inspection of the subject vessel and conducted interviews/inquiries, the undersigned Maritime Investigator is of the opinion that ***the possible cause of the accident was a fire at the paint room and caused by the transmission of heat from the heated fan motor and transmitted a hot gasses under the lower deck level thru convection that resulted the accumulation of hot gasses between the ceiling and the affected weather deck where the fire occur at the paint room and fan room resulting and causes a spontaneous explosion of hot gasses in the promenade deck area that resulted a total fire on board M/V Super Ferry 14.***

## VII RECOMMENDATION

1. Conduct a monthly inspections/testing of firefighting appliances and equipments;
2. Enhancement of trainings/drills of firefighting onboard;
3. Immediate replacement of all defective parts of machineries to avoid overheating or malfunctioning of operation;
4. Install fire detector (heat/smoke) of all spaces that stored flammable materials and machineries that can produces heat temperature and should appropriate ventilation;
5. Avoid using to much combustibile material that produces heavy/dark smoke within accommodations;
6. Strict implementation of Chapter VIII Reg. VIII/2 paragraph 7 of Philippine Merchant Marine Rules and Regulations of 1997 (PMMRR);
7. Installation of smoke detector and sprinkler system inside the ceiling;
8. Insulation materials in accommodation spaces, services spaces, control stations and machinery spaces shall be non-combustible. Vapor barriers and adhesive used in conjunction with insulation of pipe fittings, for cold service systems, need not be non-combustible materials, but they shall be kept to the minimum quantity practicable and their exposed surfaces shall have qualities of resistance to the propagation of flame to the satisfaction of Administration;
9. Implementation of 24hrs duty fire watch on board Passenger ship;
10. Strict implementation of Safety of Life at Sea (SOLAS) Convention and International Code of Fire Safety System (FSS) Code;

11. Creation of independent investigative body to handle related to maritime accidents/incidents under the office of the President;
12. Creation of National Transport Safety Board under the Office of the President.

Prepared and investigated by:



**ARNIE F. SANTIAGO MSc. MSA**  
**Chief, Complaints & Investigation**

01AFS/0900hrs/03/02/04