



ROMANIAN NAVAL AUTHORITY

Address: Constanta Port No.1 – 900900 Constanta - ROMÂNIA

Ph: +40241/61.61.24; +40241/60.22.29
Fax: +40241/61.62.29 ; +40241/60.19.96
E-mail: RNA@RNA.RO



REPORT

ON THE INVESTIGATION OF THE INCIDENT M/V “GULIZAR ANA”, SEPTEMBER 2006

CONTENTS

<u>SYNOPSIS</u>	<u>3</u>
<u>1 PARTICULARS</u>	<u>4</u>
1.1 THE VESSEL	4
1.2 PSC INSPECTION	4
<u>SECTION 1 - FACTUAL INFORMATION</u>	<u>8</u>
1.1	8
1.2 ENVIRONMENTAL CONDITIONS	8
1.3 NARRATIVE OF EVENTS TILL ACCIDENT HAS OCCURRED	8
1.4 NARRATIVE OF EVENTS AFTER ACCIDENT HAS OCCURRED	9
<u>SECTION 2 - ANALYSIS</u>	<u>13</u>
2.1 AIM	13
2.2 M/V GULIZAR ANA	13
2.3 CARGO	13
2.4 TECHNICAL EXPERT REPORT	13
<u>SECTION 3 - CONCLUSIONS</u>	<u>21</u>
3.1 FINDINGS	21
3.2 CONTRIBUTORY FACTORS	21
<u>SECTION 4 - RECOMANDATION</u>	<u>22</u>

SYNOPSIS

M/V “GULIZAR ANA” on ballast voyage from Deliskelesi / Turkey to Galati /Romania - port on Danube River , for loading of about 3000 mt of steel coils.

On 8th of September before entering on Sulina Cannel , vessel has discharged ship’s ballast water from ballast tanks no.2 P/S,3 P/S and 4 P/S

On 9th of September at 18.10 hours local time (hrs/lt) vessel berthed at Galati, berth no.50 alongside of floating cane “Dobrinesti 1” and Dobrinesti 2”

In the same day at 20.00 hrs/lt loading commenced.

After loading of 5th steel coils on 9th September at 20.55 hrs/lt vessel began to lean on starboard side till the vessel’s accommodation has propped on main deck of floating crane “Dobrinesti 2”

The list of the vessel has been of 51° , at this angle the river water was at not more that 20 centimeter of hatch coaming , engine room and starboard side crew quarter have been flooded.

Immediately after the incident, four steel coils have been discharged and rescue operation started.

On 21st September 2006 rescue operations have been completed and vessel brought on seaworthiness condition.

1 PARTICULARS

1.1 THE VESSEL

IMO No	9335355
SHIP'S NAME	GULIZAR ANA
CALL SIGN	TCOI6
PORT OF REGISTER	ISTAMBUL
FLAG	TURKEY
SHIP'S TYPE	GENERAL CARGO
YEAR OF BUILD	2005
GROSS TONNAGE	2132
NETT TONNAGE	1313
DWT	3182,1
LENGTH (LOA)	81,00 m
BREATH	12,8 m
MAX DRAFT	5,588 m
CREW MEMBERS	12
OWNER	GÜNERLER TURZIM NAKLYIAT ve LTD.STI

1.2 PSC INSPECTION

The last inspection report was on 31st of August 2006 at Rijeka/Croatia without deficiencies.

1.3 THE CREW

Safe Maning Certificate issued by Turkiesh Maritime Authorities reques 11 crew members. On board 12 (twelve) crew members as follow :

Name and Surname	Rank	Natinality	Age	Experience on board of Gulizar Ana
Sezgin Guner	Master	Turkysh	41	2 months as chief officer and 2 months as master
Mehmet Cemil Bulbul	Chief Officer	Turkysh	49	2 months No previous experience
Mustafa Guner	Deck Officer	Turkysh	25	3 months
Bekir Aygun	Chief Engineer	Turkysh	68	4 months
Hasan Cilgin	Second Engineer	Turkysh	30	8 months
Engin Altintas	Boatswain	Turkysh	30	13 months
Ylmaz Urun	A.B	Turkysh	45	4 months
Osman Bektas	O.S.	Turkysh	33	5 months
Metin Uzum	O.S.	Turkysh	29	2 months
Harun Azakli	Oiler	Turkysh	27	4 months
Serkan Baykr	Wiper	Turkysh	31	2 months
Eyup Karacuka	Cook	Turkysh	41	6 months

SECTION 1 - FACTUAL INFORMATION

1.1

It was done bases on the crew member's declarations , writings in the deck and engine log books , ship's documents , stevadoring's declarations , weather reports and technical expert report.

1.2 ENVIRONMENTAL CONDITIONS

The weather was fine., with variable winds of force 1 . The visibility was good , night time. The deep of water for Galati port was 274 + 13.

1.3 NARRATIVE OF EVENTS TILL ACCIDENT HAS OCCURRED

Time : UTC + 3

At 18.20 hours after berthing of the vessel , Mr. Vrabie Marian , stevedoring operator , has boarded the vessel and meet the captain in order to establish the loading sequence. The captain has handled the cargo plan to the stevedoring operator and inform that he want to commence loading of the holds from hold's side , in hold no.1 aft part and in hold no.2 fore part.

Stevedoring operator has inform the captain that in order to commence the loading from the hold's side he must bring in the holds two forklift trucks.

At 19.00 hours , shift changed. Vessel ballast condition : ballast tank no.1 P/S full (about 84 mt) , tanks no.2,3 and 4 empty.

Following of information received , the new stevedoring operator has arranged two gangs for loading at m/v Guliza Ana.At about 20.00 hours commenced bringing of forklit in hold no.2 After the forklift was brought in hold no.2 at 20.30 hours loading commenced.

As the floating cranes can not load the colis at ship's side the loading procedure was to load the coils in central position , temporary fixed by two slats and after crane's hook clear the area , coils transfered by forklits on port side or starboard side for final loading position First steel coil loaded in hold no.2 , fore part port side , the second steel coil loaded fore part /starboard side and 3rd one loaded on port side.At this stage loading operation was stoped in order to bring the second forklift in hold no.1.

Loading of the steel coils in cargo holds was done under supervise of captain (on deck) , 2nd officer inside of hold no.1 and boatswain inside of hold no.2. The steel coils were loaded inside the hold over three dunnage slats placed crosswise of ship's longitudinal and according with guideline of loading/stowage of steel products. The slats dimension : cross section 76x76 mm , length about 2 m.

After loading of the 3-rd steel coil in hold no.2 , the captain ordered to pump out the water from ballast tank no.1 .

Steel coil no.4 was loaded in hold no.2 in central position , fixed by two dunnage slats , forklift also in central position waiting for crane hook and slings to clear the working area. At the same time first steel coil was loaded in hold no.1 in central position , fixed by two slats. , forklift also in central position.

At 20.55 hours when the forklift from hold no.1 pick up the coil and try to fix it on starboard side , the vessel start to lean. Due to the vessel's list the coils loaded on port side have shifted on starboard side , increasing the vessel lean. The stevedores and crew left the vessel.

1.4 NARRATIVE OF EVENTS AFTER ACCIDENT HAS OCCURRED

At a list of about 44 degree engine room and starboard side crew quarter have been flooded.

The vessel continue to lean on starboard side , till the vessel's accommodation (bridge wing) has propped on main deck (mooring bitts) of floating crane "Dobrinesti 2"

The final list of the vessel has been of 51 degree , at this angle the river water was at not more that 20 centimeter of hatch coaming ,

Immediately after the incident, four steel coils have been discharged and rescue operation started. All openings of engine room and crew quarter were sealed and the water pumped out.

On 21st September 2006 rescue operations have been completed and vessel brought on seaworthiness condition.







SECTION 2 - ANALYSIS

2.1 AIM

The purpose of the analysis is to determine the contributory causes and circumstances of the accident as a basis for making recommendations, if any, with the aim of preventing similar accidents occurring again.

2.2 M/V GULIZAR ANA

1. vessel arrived at Galati port in ballast condition , with ballast tank no.1 P/S full – about 84 mt , ballast tank no.2,3 and 4 empty ;
2. at loading of first steel coil , vessel has lean on port side . The list was 10 to15 degree;
3. at this stage captain did not stop the loading, although was informed by stevedores that the vessel had problems with transversal stability
4. after loading of only three steel coils, captain decide to de-ballast tank no.1 P/S;
5. method of loading and ballast condition not in accordance with vessel's transversal stability.

2.3 CARGO

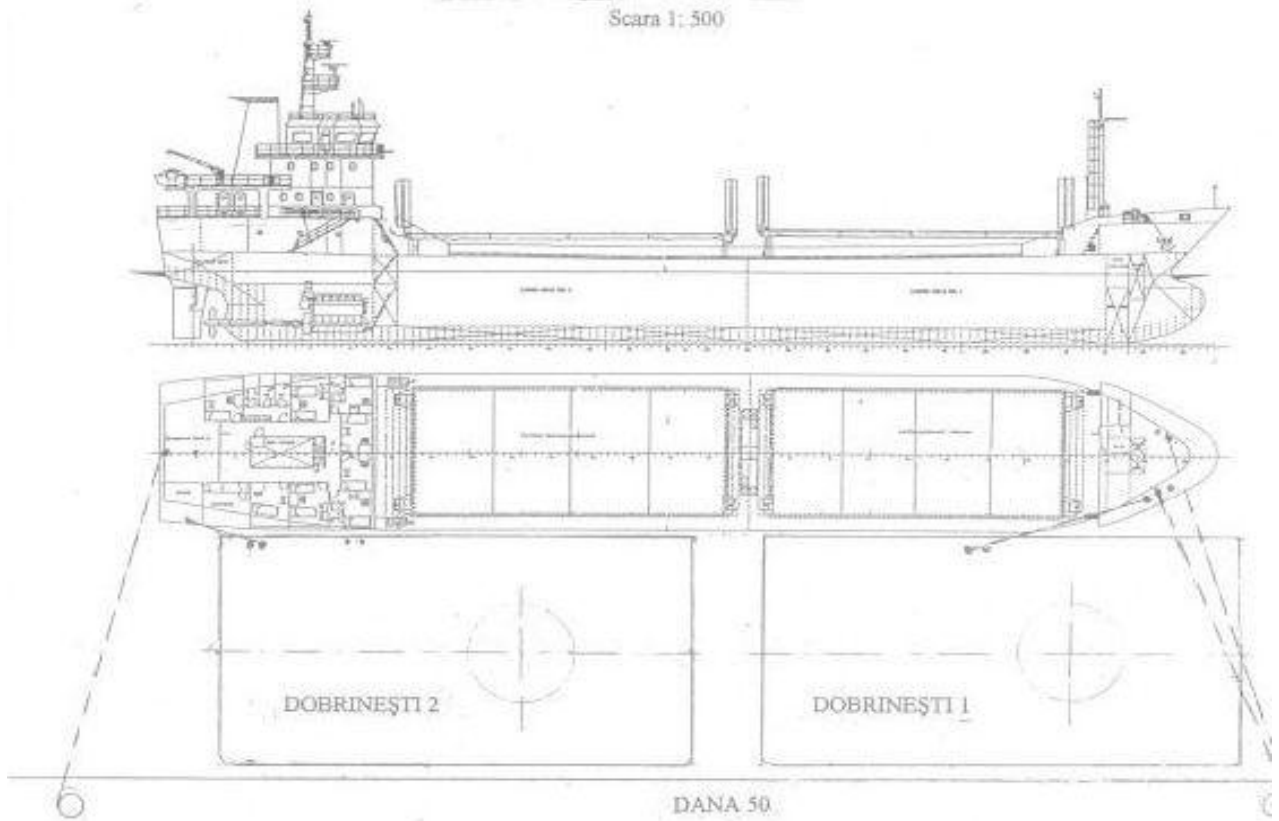
1. the steel coil weight – between 18,2 and 21,5 mt , not taken in to consideration when method of loading was chosen ;
2. the forcklift weight also not taken in to consideration – about 34 mt.

2.4 TECHNICAL EXPERT REPORT

1. temporary fixing of steel coils by wood wedge , not efficint at a list greater than 15 degree ;
2. maximum angle of vessel's stability during loading – 25 degree ;
3. at a list of 44 degree the river water has flooded in to crew quarter through the windows ;
4. engine room flooded through an emergency exit hatch , left opened, increasing the vessel's list.

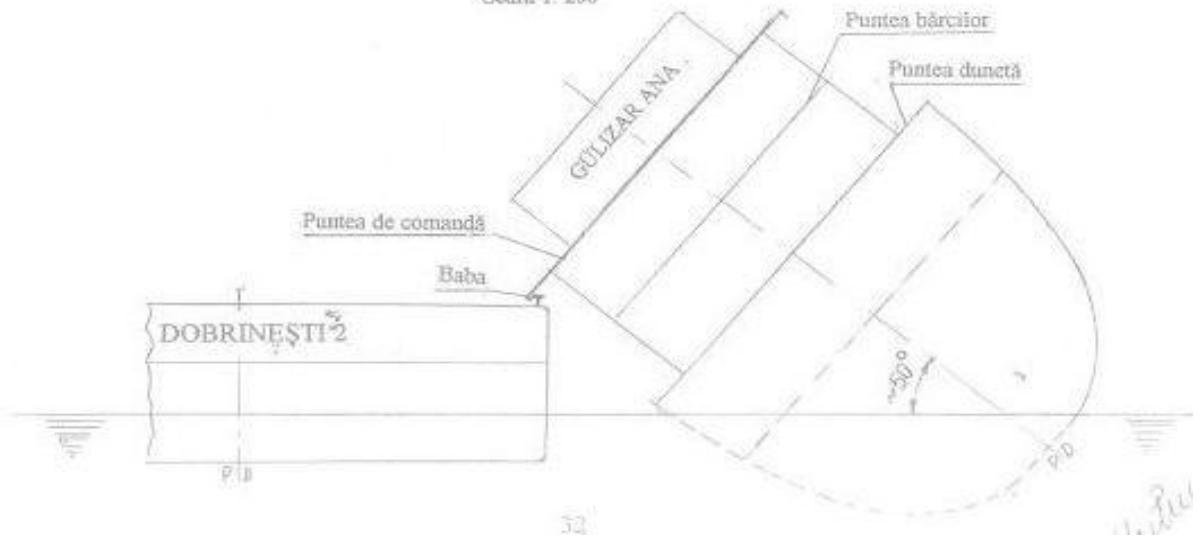
M/V „GÜLIZAR ANA”
POZIȚIA NAVEI LA DANA 50 A
PORTULUI BAZINUL NOU GALAȚI
DATA DE 09.09.2006 orele 20⁰⁰ 21⁰¹

Scara 1: 500



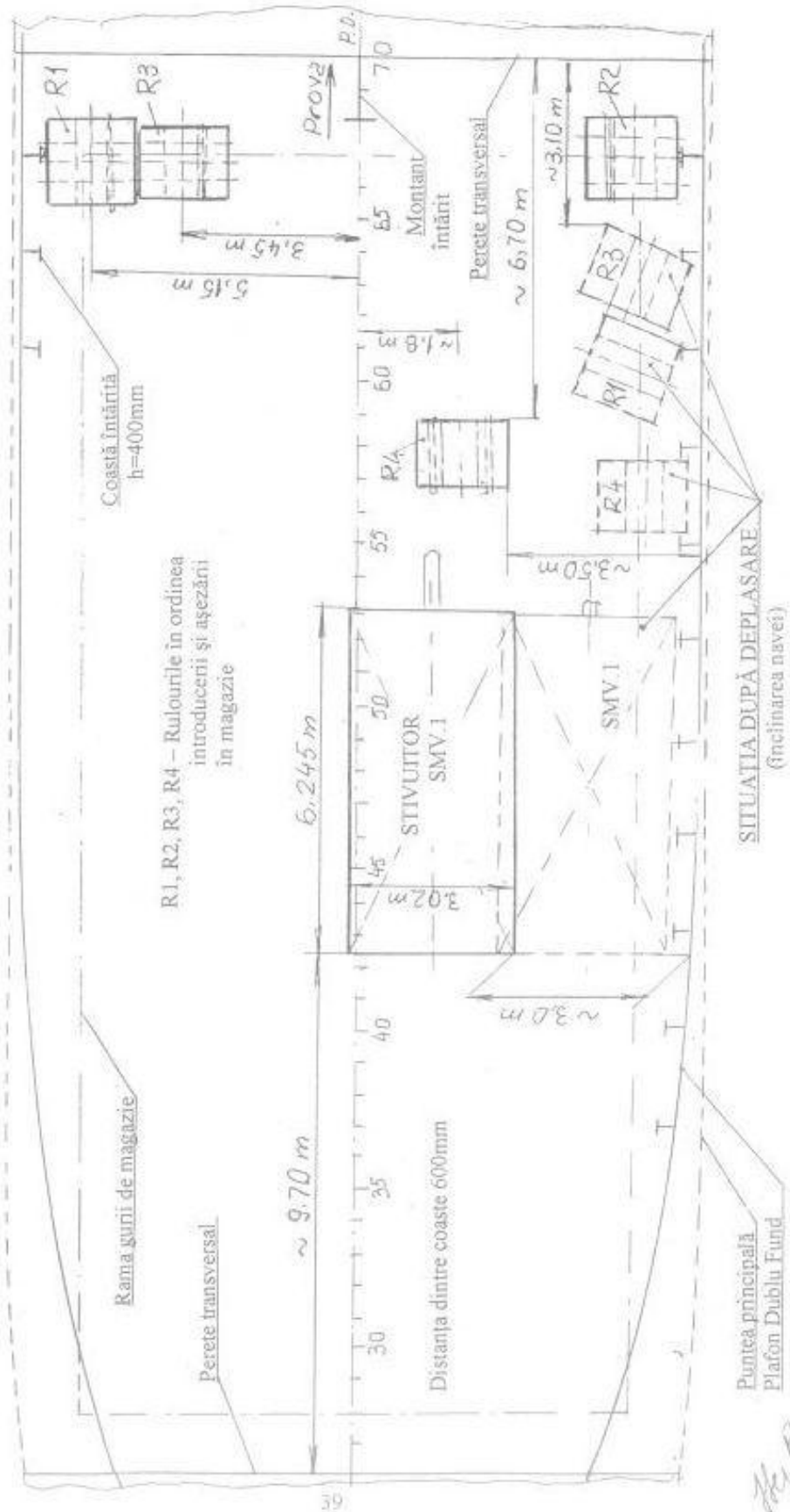
Nava după înclinare cu cca. 50° în
bordul tribord și sprijinire cu puntea
de comandă pe bazele de la pupa
a macaralei „DOBRINEȘTI 2”

Scara 1: 200



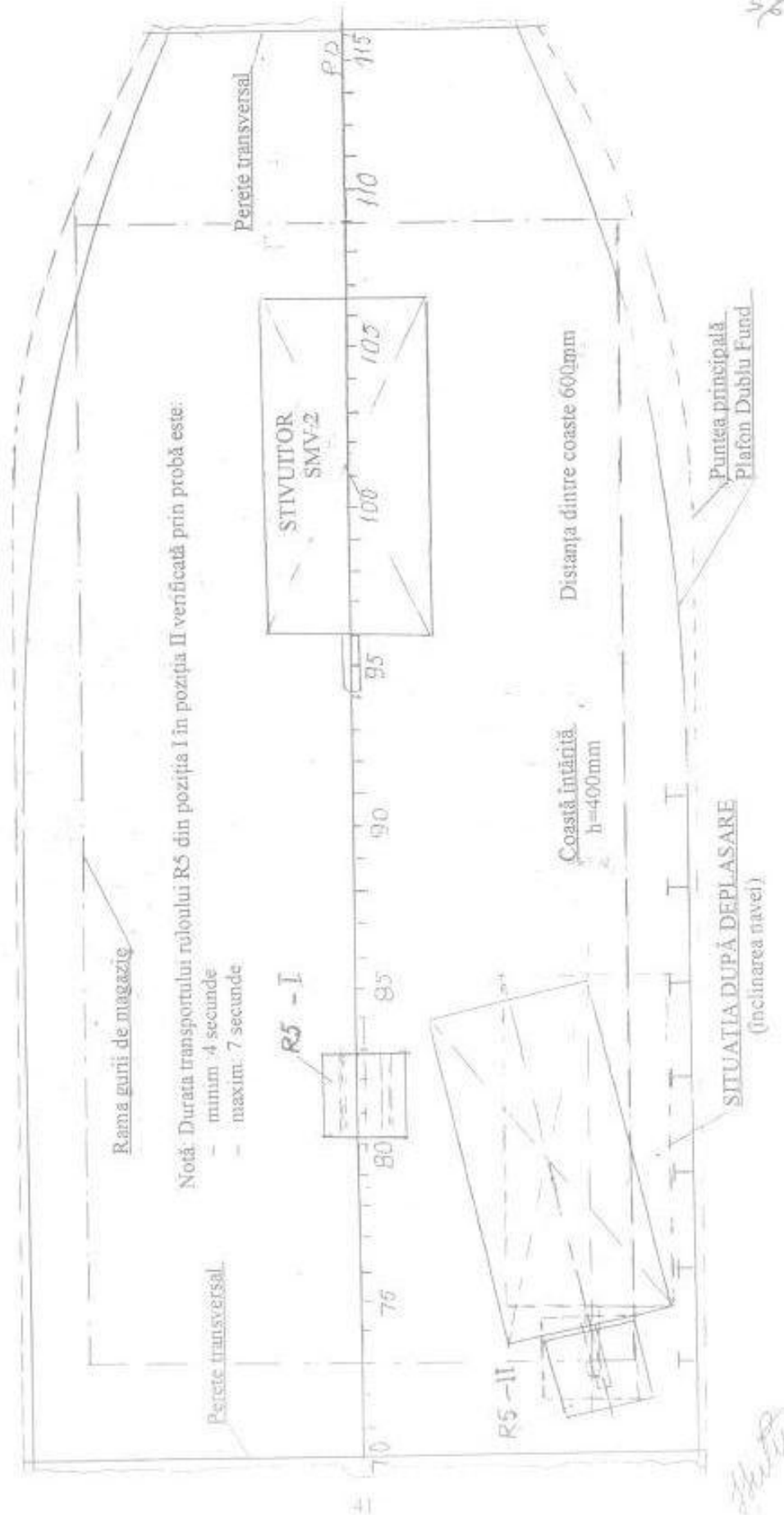
Vessel berthing position and vessel's position after lean , about 50°list

M/V „GŪLIZAR ANA” – MAGAZIA NR. 2
 POZIȚIA RULOUIRILOR ȘI STIVUITORULUI ÎNAINTE ȘI DUPĂ DEPLASARE ȘI ÎNCLINAREA
 NAVEI LA DATA de 09.09.2006 ora:21,00
 Conform declarațiilor echipajului navei
 Scara 1:100



Hold nr.2 - coils and forklift position before and after leaning

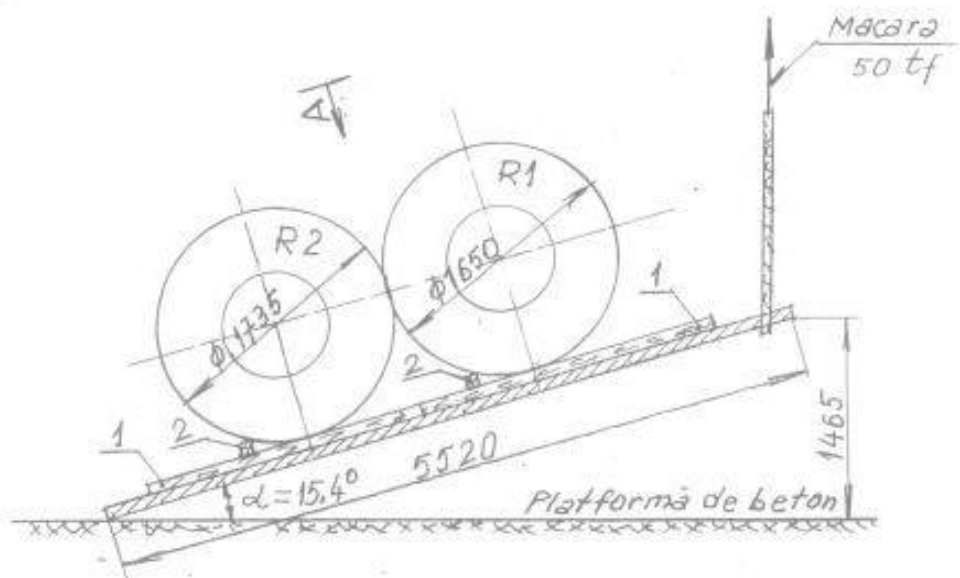
M/V „GŪLIZAR ANA” – MAGAZIA NR.1
POZIȚIA RULOLUI R5 ȘI STIVUITORUL ÎNAINTE ȘI DUPĂ DEPLASARE ȘI ÎNCLINAREA
 NAVEI LA DATA de 09.09.2006 ora: 21,00
 Conform declarațiilor echipajului navei și stivatorilor.
 Scara 1:100



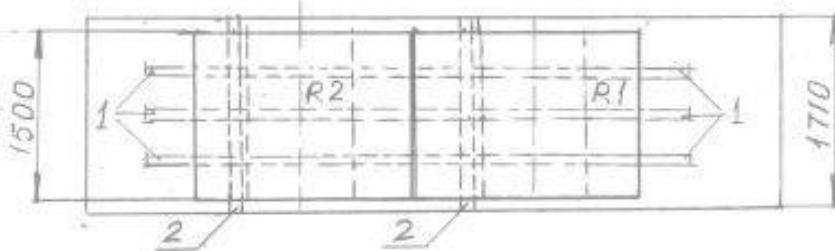
Hold nr.1 - coil and forklift position before and after leaning

DETERMINAREA UNGHIIULUI DE INCLINARE
LA DEPLASAREA RULOUIRILOR

SACRA 1 : 50



Vedere din A

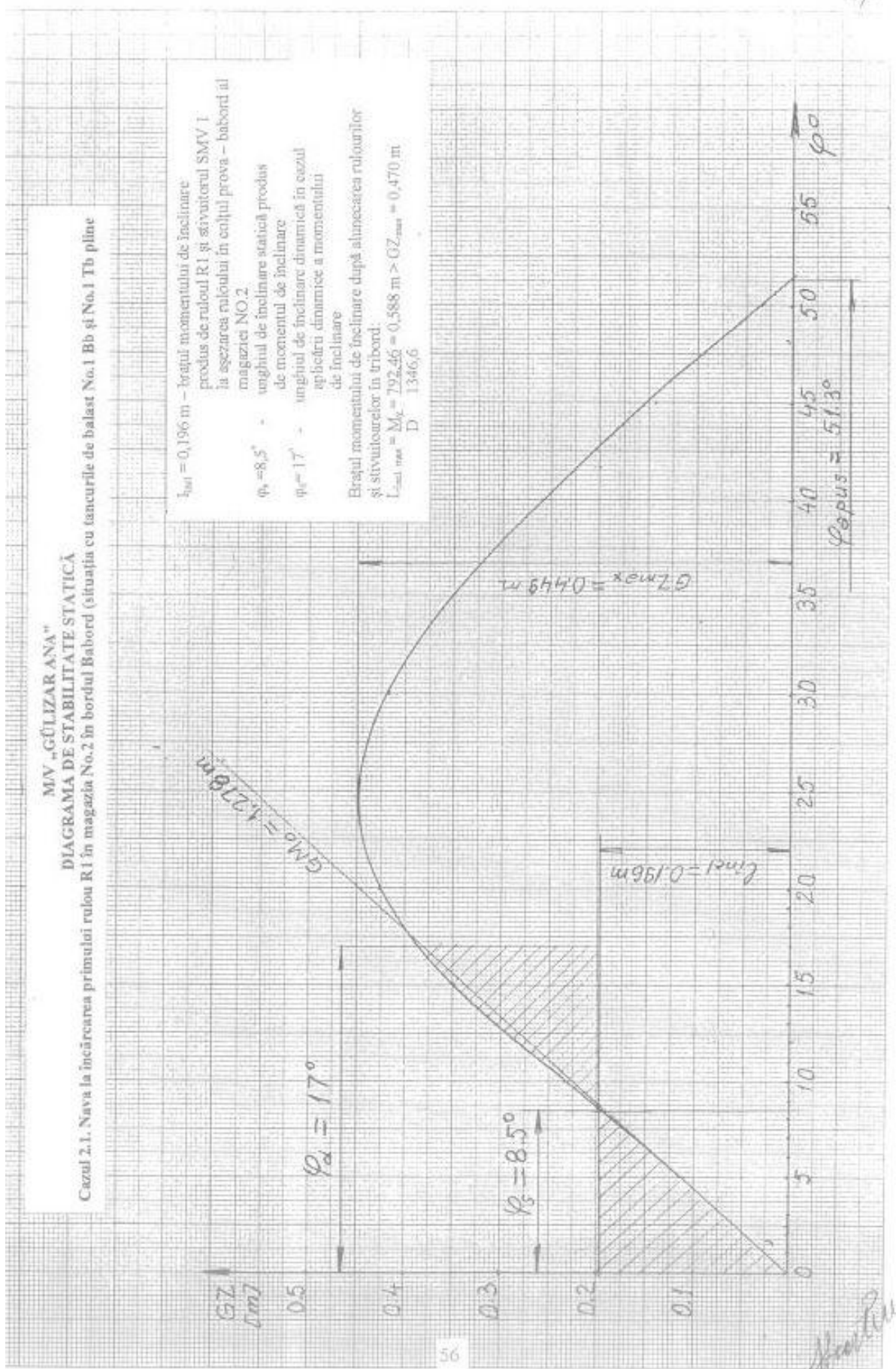


- R1 - Rulou nr.689749, masa = 20020 kg
- R2 - Rulou nr.696312, masa = 22400 kg
- 1 - Rigla suport - lemn de brad : 7,6 x 7,6 cm; l = 2,5 m
- 2 - Rigla de impanare - lemn de brad : 7,6 x 7,6 cm; l = 1,8 m

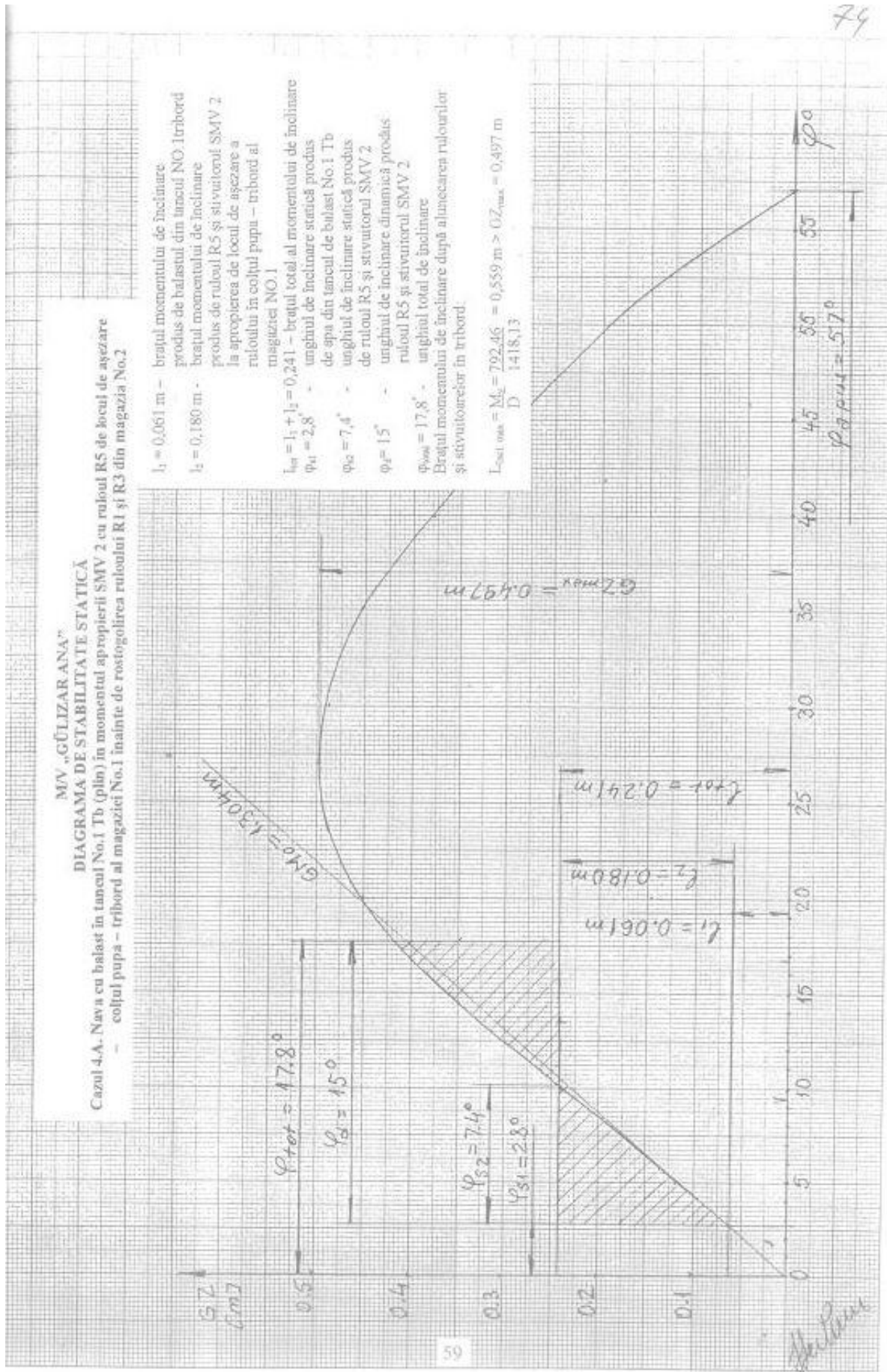
Data : 18.10.2006

Intocmit,
Ing. Serbencu Ion
Ștefan

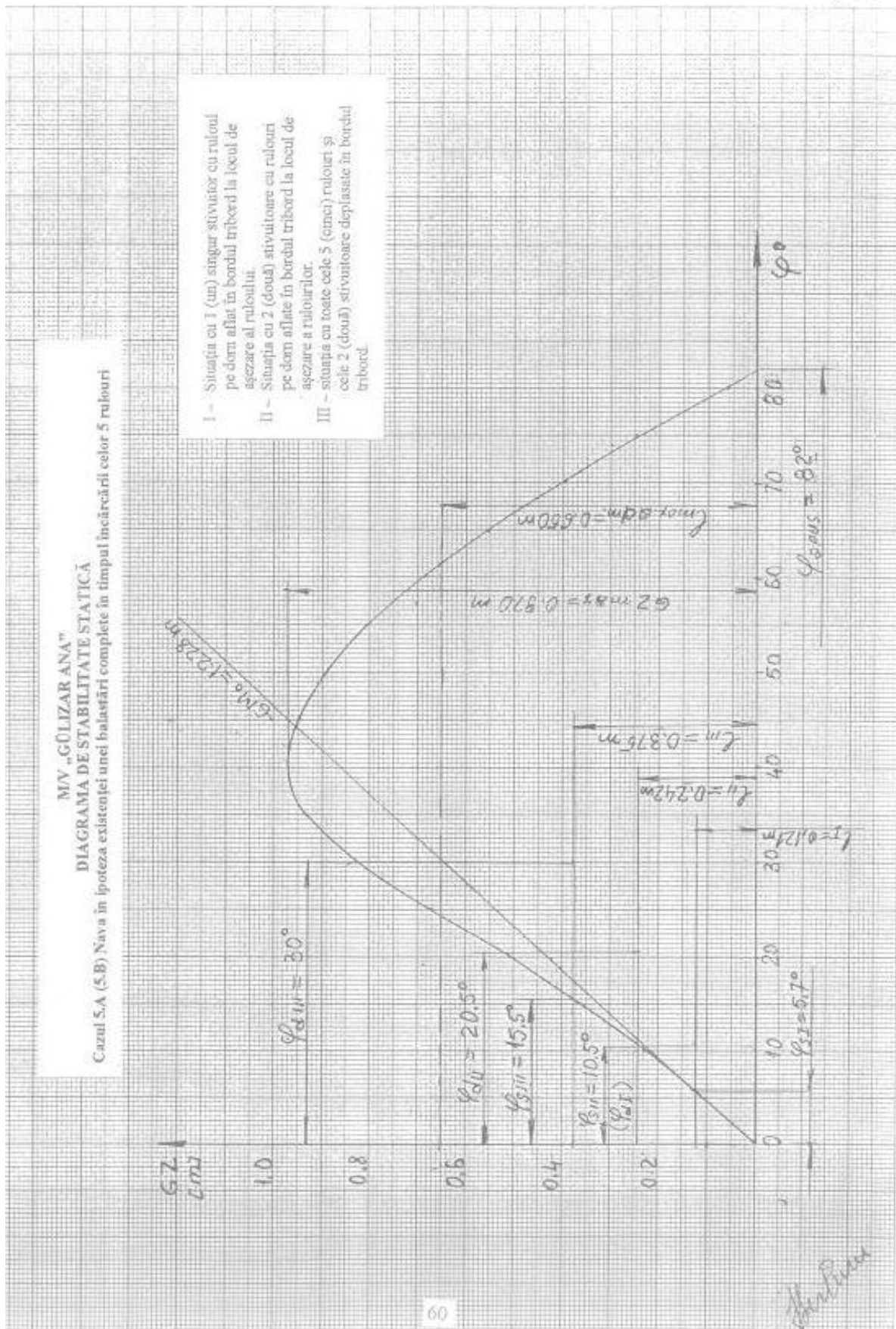
Determination of list angle when coils start shifting



Stability diagram before loading



Stability diagram after loading of coil no.5



Compared stability diagram during loading

SECTION 3 - CONCLUSIONS

3.1 Findings

The following safety issues have been identified as a result of this investigation. They are not listed in any order of priority.

1. during the course of the investigation it was found that the company instruction regarding cargo loading and safety of loading not followed;
2. loading manual not followed ;
3. captain can not present any stability calculation ;
4. ballast water management plan not followed ;
5. emergency procedure in case of ship's flooding not follow ;
6. main engine and crew quarter damaged by flooding ;
7. there was no pollution or environmental threat by lean of ship.

3.2 Contributory factors

Non-compliance with company safety regulations , improper risk assessment, poor training, lack of knowledge in handling of cargo – steel product and lack of coordination are the main contributing factors for the lean of the vessel.

SECTION 4 - RECOMANDATION

- a.** the vessel should be at all times manned sufficiently, efficiently and safely in compliance with *Chapter V (safety of Navigation), SOLAS 74/95*, so as to ensure that all activities are carried out in safe manner.

- b.** the company should ensure that at all time , company procedure and safety regulations are followed

- c.** the company should recruit experienced personal as senior officer on board of his vessels.

**GALATI HARBOUR MASTER
INVESTIGATION DEPARTMENT
Inspector,
Mihai Cotlogut**