

**Court of Magistrates (Malta)**  
**Magistrate Dr. Jacqueline Padovani LL.D., LL.M (IMLI)**  
**Assessors Master Mariner Captain Mario Grech,**  
**Master Mariner Captain Joseph Gabriele,**  
**Assessor Chief Engineer Joseph Amato**

**The Maritime Inquiry regarding the sinking of the fishing vessel Klein Familie  
on the 5<sup>th</sup> of January, 2006.**

Today 18<sup>th</sup> April, 2012

The Court,

Having seen the application filed by Alfred Cremona dated 17<sup>th</sup> January, 2006 wherein following his appointment as inquiry officer by the Minister for Competitiveness and Communications to conduct the informal maritime investigation, was of the opinion that it was necessary and expedient that a formal inquiry be held in accordance with Art. 314(1) of the Merchant Shipping Act, Chapter 234 of the Laws of Malta and for all the purposes of the said Act;

Having seen the statement of the case of the Casualty of the fishing vessel Kleine Familie;

Having seen the questions proffered by the inquiry officer to the effect that this Court should:

1. Establish the involvement or otherwise of the Maltese Ship "Sichem Pandora" in the event which resulted in the sinking of the French fishing vessel "Klein Familie" off the Coast of France on the 5<sup>th</sup> of January, 2006;
2. In the event that it is established that the ship Sichem Pandora was involved in the said sinking, to establish the facts and circumstances

thereof, and whether responsibility can be attributed to any person or persons and if so to whom;

Having seen the decree of the Court of Magistrates of the 18<sup>th</sup> of January, 2006 in terms of Art. 314 of Chapter 234 of the Laws of Malta; the appointment of Master Mariners Captain Mario Grech, Captian Joseph Gabriele, and Chief Engineer Joseph Amato;

Having heard the evidence tendered on oath;

Having heard and examined the testimony and exhibits received by virtue of the Letters of Request to the French Judicial Authorities;

Having seen the note of submissions filed by the families of the victims and the surviving crew member of the Klein Familie of the 3<sup>rd</sup> of June, 2011;

Having seen the note of submissions filed by the owners of the said vessel MV Sichem Pandora, the crew and the Charterers of the said vessels of the 18 of October, 2011;

Having heard the final oral submissions;

Deliberates;

This maritime investigation gathered its principal evidence from the informal inquiry conducted by Alfred Cremona and Captain Mark Chapelle, the evidence gathered in the French Proces Verbal and the evidence collated in the formal maritime inquiry by its Court and Assessors.

### **1. Informal Inquiry**

Inquiry officer Alfred Cremona (vide pg14 et seq) confirmed the notice served on all parties concerned and exhibited the confirmation of service Dok AC, AC1 to AC15, (pg27 to 43);

Alfred Cremona exhibited his letter of appointment of the 9<sup>th</sup> of January, 2006 attached with the original application;

Alfred Cremona testified that he travelled to Dunkirk together with his appointed assistant Captain Mark Chapelle and interviewed most of the crew of the Sichem Pandora ie the Captain, the Chief Officer and the able Seaman (AB) on watch, Second officer, Third officer, and the Cook. Captain Chapelle concerned himself with the technical information from the ship. There after Cremona and Chapelle proceeded to Cherbourg where they interviewed the sole survivor, Jean-Michel Gueno. They subsequently proceeded to Cross Station and collected a copy of the course recorder.

Alfred Cremona exhibited Dok C1, 2, 3 i.e. the general notes and observations of Captain Chapelle of the Equipment of the Sichem Pandora, Doc. AC16 the provisional certificate of registration; the declaration by the owners of the company (pg48) Doc AC17 crew list of the vessel Sichem Pandora Doc AC18, report by Maritines Lancome AC19, extract High and low waters (pg55), AC20 List of crew of Klein Familie, AC21 statement of Michele Gueno (pg57) AC22 qualification of Michele Gueno (pg65), AC23 statement of Master Alexander Galyanov, AC24 statement of Ogarkov Vasiliy (pg74), AC25 and AC25 a Medical certificate of Ogarkov Vasiliy (pg82), AC26 statement of Rudenko Aleksey (pg84), AC27-31 Medical certificates of Rudenko Aleksey, AC33 statement of Sergey Rudich, AC34 Seaman's passport, AC35 Medical certificate of Sergey Rudich, AC38 statement of Aleksandrs Belikovs, Able Seaman and physical fitness and certificates AC39, AC40 and AC41 statement of Aleksejs Bogackins, AC42 Tesma Singapore Pte. Ltd Gangway Log, Corrispondance by Captain AC43, Report Paris Mou Doc AC44, AC45 Navigation equipment log book, radar maintenance schedule, compass error book, and deviation table, AC46 Passage Plan, AC47 Chief Officer's log book, AC48 Weather forecasts for the 4<sup>th</sup> and 5<sup>th</sup> of January, 2006, AC49 Port Radar, AC50 Log of operations, AC51 Service Commissioning report, AC52 GMDSS Radio Log, AC53 Pilot card, AC54 Personal and training manual, AC55 Extract from Master's Scrap Log book, AC56 On board training check list, AC57 Work-time log, AC58 Ship operation manual, AC59 Bridge's order book, AC60 Watch and Mooring schedule, AC61 Copy of receipt of course recorder, AC62 copy of course recorder and 4 Charts numbered 2454, 2442, 2450, 2451 marked AC63I, II, III, IV, AC64 receipt, and AC65 video.

Michele Gueno (vide Doc AC21 at pg57 et seq), stated during the informal investigation that on the 5<sup>th</sup> of January, 2006 at midnight he boarded the Klein Familie a fishing vessel together with five colleagues. He baited 280 hooks,

Gueno stated that the vessel went full ahead at 12 knots. Gueno was licenced STCW from the "Lycee Maritime Aquacol".

On board the Klein Familie there was a 3 kilo gas cylinder. Gueno stated that the Master was an engineer and that the sailor Oliver Brusa also knew some mechanics. There were 4 large batteries which were used to start up the engine and to light up the deck. There were no compressors or generators on board.

Gueno stated that after departing, he went straight to his bunk which was situated on the starboard side in the fore and aft direction and slept. The Master always took the wheel whilst Oliver Brusa was on watch. The other members of crew were asleep. Everybody knew his job and they took turns. The Patron chose the fishing location from 5 or 6 locations.

They had 12 Km of cord with 290 hooks per kilometre. Gueno stated that he had noting to do with the navigation lights, never took the wheel and was not allowed to touch anything on the bridge. (vide testimony at pg59).

Gueno stated that as he slept, he heard a loud noise followed by a cracking noise and found himself thrown out of his bunk on to the deck floor and surrounded by water. Soon he was swimming next to the boat, near Oliver Brusa who was meant to be on watch at the time. Brusa was holding on to a ballon used to hold up the line attached to the marker buoys. Gueno tried to inflate the life raft but did not succeed. However the raft surfaced automatically. He got in and tried to row towards Oliver Brusso who however was drifting away too fast for him to catch up. The sea state was two metres high. There was no moon light and no other light except the flashing light of the man overboard, which he put inside the raft. He tried to use it to flag down a vessel to no avail.

He then found the container with flares and fired them. By this time, it was daylight. After this three ships approached him, one Astern to shelter him whilst the other ship lowered a rescue boat and he was taken on board the vessel the Alblas. Thereafter a helicopter took him to land.

Gueno stated that on board the Klein Familie there was a radar and a VHF and radar reflectors on the gantry. The structure aft was a canvas-covered canopy with a wooden and aluminium frame.

Gueno said that the Klein Familie sank in five minutes (vide pg 62).

He effected two sketches of the Klein Familie at pg63 and 64.

Master of the Sichem Pandora Captain Alexander Galyanov at pg66 et seq stated in the informal inquiry to inquiry officers Cremona and Chapelle, that on the 5<sup>th</sup> of January, 2006 he woke up naturally at 0800 hrs and was on the bridge at 0830 hrs. No alarms or calls were noted, he checked the ship's position and charts, checked the ship's mail and the ship's speed. He spent most of the afternoon, clearing documentation on the bridge. During the Second officer's watch (**later corrected to read Chief Officer's watch**), he noticed that the vessel was being followed by a patrol boat, he called Griz Nez to request the reason for this but received no reply. Captain Galyanov believed that the patrol boat suspected a pollution contravention. After supper, he went back on the bridge. At 22.05 hrs he was requested to proceed to the port of Dunkirk by Griz Nez.

He was told that it was in connection with an investigation regarding a fishing vessel. The vessel proceeded to Dunkirk, were a Dunkirk pilot boarded the vessel at 01.00 hrs on the 6<sup>th</sup> of January. The pilot informed the Captian about the incident regarding the collision of the fishing vessel. At Dunkirk, the Sichem Pandora was boarded by three police officers by 04.30 hrs. They informed him of the sinking vessel, the death of the members of crew baring one, sole, survivor.

At 8am the French police boarded the vessel, held an inspection of the hull by means of underwater divers. All ship's documentation and certification were found to be regular. Captain Galyanov made a written statement to the French police on the 9<sup>th</sup> of January, 2006. (vide pg 70).

Chief Officer Ogarkov Vasiliy (Doc AC24 at pg 74 et seq) stated in the informal investigation that on the 4<sup>th</sup> of January, 2006 he was on watch from 16.00 hrs to 20.00 hrs. He was on the bridge again on the 5<sup>th</sup> of January at 0350 and was given a handover from the Second Officer. Weather conditions were good and visability was about 7 miles. "There were other vessels including fishing vessels in all directions i.e. forward/aft port and starboard". Later on in his evidence, he said that fishing vessels were observed to be only or the port side of vessel. On the Starboard side, Vasiliy observed bright lights but he not say whether they were fishing vessels or not – vide pg75 and were about 5 miles away. The targets on the Starboard side were being plotted on the Radar (see

note 1 at pg80). Both ship's Radars and alarms were in operation. Vasiliy saw fishing vessels on the starboard side up to and between 0600 hrs and 0700 hrs. None of these fishing vessels came within 2 miles of the Sichem Pandora as the alarm would have been triggered automatically (see note 2 at pg81). After 0700 hrs Vasiliy did not see any fishing vessels in area ahead or port or starboard side and steered on course till the waypoint indicated on chart, and passage plan.

"At about 07.50 I saw, a few degrees to Port, a flashing light. It was nearly ahead and the rhythm was quick flashing. The light was white in colour" he ordered the AB to take up steering position in manual steering, and changed over from autopilot to manual. He told AB to put hard to Starboard on the wheel and then after, when the vessel was to Starboard about 25°, Vasiliy ordered midship the wheel. When the light was about 0.5 miles behind the vessel, Vasiliy told AB to bring back the vessel slowly on course (vide pg76). The buoy did not appear on the radar screens of the vessel at any time.

The Third Officer came to the bridge to take over the watch by which time the vessel was back again on course plus or minus a few degrees. The Third Officer also saw the light as he passed the vessel (vide pg77). Vasiliy alerted the Third Officer to watch out for more buoys. Vasiliy stated that it was still dark when the vessel passed the buoy. Vasiliy stated that when the ship altered course for the buoy "no irregularities in the ship's movements were experienced" (vide pg77). Vasiliy filled Chief's Officer Log book, checked cargo documentation and proceeded to the cargo control room.

At about 1700 hrs, a helicopter appeared visually on the Starboard side, used search light as though looking for pollution contraventions. At little before 18.00 hrs Chief Vasiliy tried to communicate with a patrol boat that was also flashing a search light along the hull of the Sichem Pandora. The patrol boat also checked other vessels in the vicinity. Vasiliy left the bridge at 20.10 went to his cabin and slept.

At 02.45 hrs the Second Officer called him to go to the bridge. The Captain informed them that the pilot had told him that the Sichem Pandora and other vessels were suspected of being involved in a collision with a fishing vessel and they were being asked to call at Dunkirk.

At about 08.00 hrs eleven persons boarded the vessel and Vasiliy was interrogated for about four hours and further interviews were held on the bridge.

Second Officer Rudenko Aleksey was on the bridge at 23.50 hrs of the 4<sup>th</sup> of January, 2006 for his watch which started from 0000 hrs to 0400 hrs of the 5<sup>th</sup> of January, 2006. There was nothing irregular to report during his watch, in which AB Gross Vladislavs acted as look out. The Chief officer arrived on the bridge at 03.50 hrs and look out Belikovs Aleksandrs arrived a little later. Rudenko remained on the bridge till 04.15 hrs to fill log book and hand over the watch.

After this he went to his cabin and slept. At 11.15 hrs he was on the bridge to take over the watch, together with AB Gross Vladislavs who was on look out. At 15.55 hrs the Chief officer relieved him of his watch. He remained the bridge until 17.40 hrs pursuing his duties as navigating officer.

At 18.00 hrs he relieved the Chief Officer in order for him to have dinner and was alerted that there was a target on radar approaching from aft. Rudenko states that he tried to make contact with the vessel but it did not reply on channel 13 or on channel 16.

This boat approached closer and shone a search light on to the hull of the Sichem Pandora. The Chief officer returned to the bridge and Rudenko was relieved from duties. At 23.30 hrs the third officer called him to the bridge and informed him that the ship had received instructions from the French Authorities to proceed to the pilot station. When the Dunkirk pilot boarded the vessel, he told the master that there had been a collision with a fishing vessel. The patrol boat followed the Sichem Pandora. Rudenko stated that he was not woken up by any irregular motion of the vessel on the 5<sup>th</sup> of January, 2006 after 04.00 hrs. (vide pg 87).

Rudich Sergey at pg 94, Third officer of the Sichem Pandora stated in the informal investigation that he was called at about 07.30 hrs on the 5<sup>th</sup> of January, 2006 and went to breakfast and there after to the bridge where he found the Chief officer Vasiliy, AB Belikovs and Bosun. Nothing was irregular. The Chief officer then left the bridge and the ship was on course at 075°.

Rudich Sergey stated that he plotted the ship's position, the 08.00 position was the ship's position: the ship's time was GMT +1 hr. During his watch, i.e. 08.00 hrs to 12.00 hrs there was nothing to report.

At 20.00 hrs he returned to the bridge and the Chief officer Vasiliy handed over the watch. He told him that a small boat was following the vessel. Around 20.00 hrs the Master came to the bridge and the Third officer informed him about the boat. The Master, till that point in time, was unaware about the presence of the boat.

At 22.00 hrs the French Authorities spoke to the Master and the vessel was directed to Dunkirk.

○ Aleksandrs Belikovs able Seaman on the Sichem Pandora at pg 101 et seq stated in the Informal Inquiry that on the 5<sup>th</sup> of January, 2006 he was at the bridge at 03.55 hrs to start his watch. Present on the bridge were Aleksey Rudenko and Vasiliy, Chief Officer and Gross Vladislavs AB who told him that the ship was in automatic steering.

The officers on watch did not tell him anything in particular. He carried out his patrols according to schedule at 05.00 hrs and 07.00 hrs. "The ship's movements throughout the watch appeared to be normal". (Vide pg103).

At 08.00 hrs the Vasiljevs Vitaljis came to the bridge and relieved him from his watch.

○ Belikovs stated that during his watch (between 04.00 hrs and 08.00 hrs), the Chief officer instructed him to change course. The ship was taken off autopilot and went into manual steering. This was done because he (Belikovs) had spotted a flashing light which he reported to the Chief officer.

Belikovs stated that he was requested to alter course to starboard, started by applying 15degrees of rudder, which he reduced gradually to amidships. Original course was about 070, the new course was 110degrees/ 120 degrees.

Belikovs stated that he believed it was a fishing marker that had a continually quick flashing light. After the vessel passed the buoy, the Chief Officer requested Belikovs to bring the vessel back on course. Belikovs calculated that



the marker was about 2 miles away when first sighted at 5 ° to 10 ° to port. This happened about 10 minutes to 15 minutes before 08.00 hrs.

He returned to the bridge about 16.00 hrs and found the Master and the Chief officer on the bridge. A helicopter approached which moved away some time later. Thereafter a patrol boat approached from stern to quarter, then came abeam. Chief officer tried to communicate with the patrol boat but the latter did not reply.

Bosun relieved him of his watch at 20.00 hrs. He was woken up by Bosun at 02.40 hrs and told that the ship was being directed to Dunkirk as it was suspected of involvement with a fishing vessel.

Thereafter the police boarded the vessel, interrogated him twice. Sub-acqua divers conducted an inspection of the hull of the Sichem Pandora.

Bogackins Aleksejs, Cook on board of the Sichem Pandora stated that on the 6<sup>th</sup> of January, 2006, he was out of bed at 05.40 hrs, and went to the galley to start cooking. The ship was not rolling or pitching. He said that the Chief officer probably came down for breakfast but he could not be sure.

The Inquiring Officer Alfred Cremona at pg241 exhibited Doc AC66 a picture of the fishing vessel, Klein Familie; Doc AC67 the inquiry carried out by the French Ministry of Justice together with some correspondence; AC68 a fax to the legal representatives of the survivor and the missing crew of the Klein Familie.

## **2. The French Proces Verbal**

On the 26<sup>th</sup> of January, 2006 at the Palais de Justice, Cherbourg, Prosecutor of the Republic of France, Michel Garandon vide pg 479 consigned the proces verbal in three volumes regarding the French investigation into the sinking of the Klein Familie.

The proces verbal transmitted by the French authorities was translated by Ms. Clementine Aveta.



The contents of the process verbal include a dispatch note (pg 708/710) synthesis of the official report by the Missing Persons Bureau pg 711 with the conclusions that appear at pg724 and 725.

The first account of Jean-Michel Gueno (vide translation at pg727/8) was taken by the Judicial Police Sauchaut and Levavasseur on the 5<sup>th</sup> of January, 2006 at 15.15 hrs at Centre Hospitalier Louis Pasteur, Cherbourg.

Gueno stated that he had been on board of the Klein Familie since March 2005, after he obtained his Cap as fisherman/sailor at the school of fisheries in Cherbourg, his duties being on the deck and hold. Gueno stated that the Klein Familie was a Cordier and the Master was Thierry Goueslain.

On board the Klein Familie besides himself, were the following crew members:

Franck Herouville

Ludovic Herouville

Frederic Terpereau

Olivier Brusa – Mechanic

Thierry Goueslain – Master

Gueno stated that the Klein Familie departed at 04.00 hrs to fishing ground somewhere off Aurigny. The Master was on watch and Olivier Brusa was on look out. Other members of crew were a sleep below deck.

All of a sudden, he heard a horrendous noise and was ejected from his bunk. He grabbed the ladder and was engulfed by the current and ejected out to sea. He saw Olivier crying out for help. The boat had sunk and there was a life raft floating nearby. He had an impression of seeing the back of a blue vessel with yellow tubes running across.

Gueno tried to free the liferaft but could not. However the liferaft re-surfaced and he managed to climb inside. He tried to reach Olivier who was calling out to "Lulu" (Ludovic Herouville (vide pg729). Olivier however refused to let go of the buoy that he was clinging to in order to swim to the raft. Gueno tried but could not reach him. After that he drifted for sometime and perceived a boat in the distance and tried to flag it down – to no avail.



He found a bag containing flares and when three cargo vessels approached, he fired two flares. It was then that a cargo vessel lowered a liferaft which rescued him. This was The Alblas.

Gueno stated that after the impact, he did not see the name of the vessel when he resurfaced. He believed that it was about one hour to one and a half hours before sunrise that the impact occurred. Gueno stated that the Klein Familie was a good boat, her Master "was up to the mark as regards safety".

Charles Averty, at pg731 2<sup>nd</sup> Class Officer of the Maritime Affairs Technical and Administrative unit at Cross Jobourg testified that on the 5<sup>th</sup> of January, 2006 at 07.48 am the Alblas signalled the activation of two red flares in the Casquets upstream channel. This was confirmed by the vessel "Steines". The Alblas lowered a liferaft to Gueno at approximately 07.54 hrs and Gueno boarded the vessel at 08.45 hrs Zulu time (1 hr ahead of French time).

Rescue operation took place at 49°38'00" N, 12°38'00" W i.e 13 nautical miles North West of the Casquets lighthouse French sector. Averty confirmed that no distress call was transmitted by the Klein Familie and the boat which was of a small size had a wooden hull and therefore did not appear on the radar. The trajectory of the Siche Pandora at the presumed time of impact showed a sudden change of course. (vide pg 732).

A request for the weather forecast of the day, the current charts, the list of vessels in the area, their trajectories and radio communication file of the Siche Pandora and the day book of the Klein Familie was made.

Claude Jean Hubert at pg737 exhibited the above mentioned documents. At pg 739, the weather condition on the 5<sup>th</sup> of January, 2006 were the following:

1. wind direction ESE(120deg. True)
2. wind speed 11.1 knots
3. wave height 3.6ft
4. air temperature 40.60 F
5. Water temperature 51.8 F
6. Visibility 12.4 miles
7. Wind chill 33.4 F (Vide pg740).

At pg741 to 751 the annotation of radio messages and conversation with cross was exhibited.

Chief officer Ogarkov Vasiliy, aided by interpreter Sarah Damie, gave evidence before the Judicial Police. He said that he had held the post of Chief Officer for 11 years and had boarded the Sichem Pandora only 15 days previously. He stated that his first watch was from 04.00 hrs to 08.00 hrs: his second watch was from 16.00 hrs to 20.00 hrs. He stated that he was replaced by the Third Officer at 08.00 hrs on the 5<sup>th</sup> of January, 2006.

Vasiliy confirmed that the navigation course was prepared beforehand and that;

“on reaching a change in course, we go to manual and the duty Chief Officer orders the change in course. When the situation is clear... we reverted to automatic pilot”.

○ He confirmed that the Sichem Pandora had several alarms both on radio and GPS, which detects deviations of 60 metres, whilst the Arpa radar alarm was set at 2 nautical miles.

Alarms once set off must be stopped manually. He said that at 06.49 hrs he changed course to 075 in order to enter the Traffic Separation Scheme. At 08.00 hrs, he “was obliged to move away from course to avoid a white rapid luminous fishing buoy”. This happened close to the change of watch. (vide pg754).

○ Vasiliy confirmed that he effected an anti collision manoeuvre before the end of his watch to avoid this luminous buoy. He heard no noise, felt no impact in the course of the manoeuvre. There were no distress calls. No pan pan or may day signals were picked up on Channel 13 or Channel 16.

It was still total darkness when he was relieved from his watch. Asked to explain the traces of yellow and green paint on the hull of the Sichem Pandora and the scratches on the same hull, he replied that he had no answer and could not account for it at pg756.

He said that on carrying out the urgent manoeuvre, he changed to manual and the manoeuvre lasted five minutes. He said that a faster vessel had overtaken them and went by, less than 2 nautical miles away. (vide pg756).

Sarah Damie at pg757 confirmed that she acted as translator to Vasiliy Ogarkov.



Captain Alexander Galyanov at pg759 et seq testified before the French Authorities on the 6<sup>th</sup> of January, 2006 stating that he was aware of the necessity of an inquiry following the wreck of the Klein Familie. He said that he held the position of Captain for 6 years on the Sichem Pandora and her sister ship The Padua. On the 28<sup>th</sup> of December, 2005 the vessel left Sfax Tunisia / destination Flushing to load a cargo of Parafin for Montreal Canada.

On the 22<sup>nd</sup> of December, 2005 they started to flying the Maltese flag. Morten Werrings Rederi A/S Strandeveien Norway is the Company that owns the vessel. Captain Galyanov consigned the documents mentioned at pg 760 to the French Authorities.

Captain Galyanov stated that he was informed very briefly by Cross Griz Nez of the wreck over VHF Channel 13 during the rerouting request. He only obtained further details from the pilot who boarded the vessel at 01.00 hrs. No message relating to security was received on Immarsat C or Navtex and three channels i.e. Channel 13, 16 and 17 on board of the Sichem Pandora were operative.

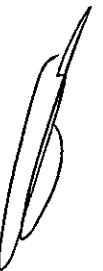
Galyanov stated that the weather on the 5<sup>th</sup> of January, 2006 at 04.00 hrs was Force 4, North Easterly Wind, cloudy skys, visibility 7 miles, sea 3. Same conditions obtained at 08.00 hrs.

Galyanov stated that they changed ballast between the 2<sup>nd</sup> of January, 2006 at 10.00 hrs and the 3<sup>rd</sup> of January, 2006 at 03.00 hrs to steam-clean tanks in preparation of a different cargo.

Galyanov confirmed that Chief Officer took the shift (watch) from 04.00 hrs to 08.00 hrs. after which the Third Officer took over. Galyanov was on bridge at 08.30 hrs.

On being shown, a copy of a trajectory determination of the Sichem Pandora and asked whether an impact seemed to have taken place on the starboard side, compensated by progressive return to course, Galyanov stated that nobody mentioned anything to him. It was possible that it was an anti collision manoeuvre. The Chief Officer had not even hinted at it. Galyanov affirmed that the two radars were operative.

Shown the traces of ripping along 10 metres of the hull starting from the Bulbous bow starboard side, the presence of yellow and green paint and



scratches of the same hull, Galyanov responded that he was unable to define the origin of the traces.

Asked whether he believed the Chief Officer's assertions that he was avoiding a luminous buoy, Captain Galyanov stated that he did not know the Chief Officer well enough because the Chief Officer had only been on board the vessel for 15 days. However, he was highly experience according to his licence.

Galyanov gave details of the 15 crew members of the Sichem Pandora stating that they all possessed the necessary certificates and diplomas, that there were three officers apart from himself so that no one worked more that 8 hrs daily in two watches and there was also an AB on watch on the bridge.

Iris Boehle acted as an interpreter from the Russian to the English language.

Rudich Sergey assisted by interpreter Sarah Damie stated at pg 766 et seq that on the 5<sup>th</sup> of January, 2006 at 08.00 hrs he took over the watch from the Chief Officer who pointed out that he had changed course just prior to 08.00 hrs.

Rudich stated that whilst he was on watch, the vessel's course remained unchanged.

Before starting his watch, Rudich Sergey stated that he heard no abnormal noise or impact, encountered no navigation problems during his watch that ended at 12.00 hrs. He confirmed he was listening to Channel 13 and 16 and heard nothing in particular on these channels. With him on watch was Vasiljevs Vitalijs. He affirmed that he was not aware of the wrecking of the Klein Familie at sea. He heard nothing from Cross and added however that if the messages were conducted in the French language he would not have understood.

Vasiljevs Vitalijs through the interpretor Boehle Iris testified before the French authorities that he was conducting his watch duties with the Third Officer Rudich Sergey between 08.00 hrs and 12.00 hrs on the 5<sup>th</sup> of January, 2006.

The Chief Officer had handed over the watch to the Third Officer Rudich and everything looked okay. Vasiljevs conducted a surface watch because the Traffic was heavy and it was still dark.

His watch was uneventful and they were listening to channel 13, 16 and 17.

He confirmed that in the course of his watch, there were no abnormal course alterations, "just normal anti collision manoeuvres. Anyhow it is not my field but the duty officer's. I confirm that during my shift no major incident or accident took place". (vide pg770).

Aleksandrs Belikovs gave his testimony before the French authorities (vide piece 10 at pg 552) where he confirmed the necessity of the inquiry following the sinking of the Klein Familie. He said that he was a qualified Able seaman on board of the Sichem Pandora and that he does not work more than 8 hours per day and these are divided in two non-consecutive watches. He had 6 years experience of this work but that this was his first contract. He said that at 03.55 hrs he was on the bridge for his watch, he was not tired and in good health.

There was nothing remarkable about his watch. He carried out a patrol at 05.00 hrs and 07.00 hrs on the superstructures and there was nothing abnormal to note. He saw a white flashing light and notified the Chief Officer. He ordered him to take evasive action. The Chief Officer commanded him to take the ship off autopilot into manual. After this manoeuvre, the Chief Officer requested Belikovs to bring the vessel back to course and the Chief Officer returned the vessel to autopilot. At the moment that he was told to steer the ship hard over, he felt no shock and no particular noise.

The rerouting order issued by the State Prosecutor Garrandeau together with the attempts of its notification stand at pg774 to 780.

The Official report of the index of documents stands at pg781.

Jacques Cadiou at pg783 retired pilot and B.E.A Mer Investigator stated that he boarded the Sichem Pandora and was welcomed by Captain Galyanov and was assigned the course recorder against a written receipt. Cadiou perceived a peak, corresponding to a 40° change of course towards the right at 07.00 UTC i.e. 08.00 French time.

This peak corresponded to a considerable sudden change of course and was believed to be an important factor in the investigation. M.D.L. Christophe Colette consigned the course recorded to the Public Prosecutor.

A Port State Inspection (Paris M.O.U) of the Sichem Pandora was conducted on the 10<sup>th</sup> January, 2006, where no deficiencies were found. (vide pg791).

Claude Jean Hubert exhibited certificates regarding the fishing vessel Klein Familie at pg795 et seq and exhibited the following:

- a. the maritime employment contracts of Thierry Gouseslin, of Ludovic Herouville and of Olivier Brusa.
- b. Navigation licence of the Klein Familie valid until 5 November, 2005 (vide pg810-811).
- c. Annual visit report 2003 (vide pg812)
- d. Annual visit report 2004 (vide pg815)
- e. Special Report of the 6<sup>th</sup> of August, 2003 (vide pg818)
- f. List of works carried out at Bernard Dockyard (vide pg 820/1)
- g. Annual inspection report of radioelectric station (vide pg823)

The report of the underwater inspection effected by MDC Frederic Rastello and Gandarme Willocq Hugues exhibited at pg825 to 827 where they noted their conclusions of a 15 cm wrench of iron, numerous marks of white paint, recent ripping between the bulbous bow and the fore propeller (span of 11.5 metres).

They noted several marks of ripping as well as green, yellow and white paint situated at a dept of 1.8 metres from the propeller towards the prow and covering a span of 04.5 metres over a total height of 01 metres (vide pg827).

In his second interview by the French authorities (vide pg 828 et seq), Jean-Michel Gueno states that on the 5<sup>th</sup> of January, 2006 they left Cherbourg quay late ie at 04.15 hrs (after the Calypso had sailed), having baited the lines from midnight to 04.00 hrs. They left late because Thierry was late. Thierry told them that the voyage could be a little bit rough which meant very windy and with considerable swell. Gueno remembered passing the West Strait and that they were going to fish for cod.

Gueno gave the position of four bunks – beneath the working deck, two aft and two fore, perpendicular to the direction of navigation. On the day of the incident, he was in fore starboard bunk, closest to the ladder leading up to the deck. Gueno was asleep when he heard an enormous sound, “clear and short” like that of a violent impact and was thrown off his bunk.

There was a considerable amount of water on deck and when he grabbed the ladder, water rushed on his head from the overhead-latch. He found himself swimming beside the boat and heard Olivier screaming "Lulu" incessantly. He tried to calm him down to no avail. He saw a light flickering a few metres away which was attached to a lifebuoy. At this time, he saw a vessel and he and Brusa shouted out for help but the ship, which had no sailors on deck, did not stop.

Gueno stated that though he declared that the vessel that had collided with them was blue with yellow tubes, this had to be taken with a pinch of salt because it was dark and he was cold. Gueno stated that he swam to the liferaft, tried to pull the trigger string but failed. He then swam towards Olivier Brusa but half way there, the liferaft surfaced, so he swam back and rowed towards Brusa who would not let go of the buoyant ball he was clinging to.

He then jumped into the sea to try and help Brusa but found that Brusa was drifting away faster than he could swim. He decided to return to the raft. He managed to retrieve the dan buoy which was still flickering.

Gueno estimated that between 30 to 60 minutes had lapsed between the impact and the last time he got into the life raft. He said that apart from Brusa, he saw no other member of crew and no bodies.

Gueno stated that he found a bag with flares and fired them when he saw three cargo vessels approaching him and the rescue operation by Alblas was on the way. (vide pg832).

At pg834 a photo file of the findings of the hull of the Sichem Pandora was exhibited together with an analysis report at pg836/837.

MDL Frederick Rastello and Gendarme Hughes Willocq consigned the paint samples elevated during the sub aquatic hull inspection to the Gendarmerie Criminal Research institute (vide pg840). Whilst the under water footage was consigned to the Criminal Investigation technician (Vide pg841).

Gandarme Cristophe Bertrad at pg842 consigned the sub aquatic robot VHS video cassette of the Klein Familie to Captain Glotin, Head of Maritime Operational Centre. At pg 844 Gendarme Hance Thierry Jean Marie

Berthelot Benoit Vigier and Thomas Piou set out on the patrol boat Glaive to respond to the distress call at 09.05 hrs on channel 16 reporting the firing of the red flares. They reached the location at 12.30 hrs and noted the presence of debris which they recovered. In the second patrol at 14.20 hrs more debris was recovered. (vide pg847/8).

Details of recovered items and their exact location may be found at pg849/851.

A seizure report was filed, together with a report of their transportation at pg852 and 854 respectively.

Similarly Lieutenant Stephane Chovaux assigned to the patrol boat Geranium, filed a seizure report with the list of the objects recovered. (vide pg860/2).

Popieul Marc at pg 863 exhibited his report on the recovery of the paint samples from the wreck of the Klein Familie on the 6<sup>th</sup> and on the 7<sup>th</sup> of January. (vide pg863 – 867).

At pg868 Director of the Gendarmerie National Criminal Research Institute was nominated to examine and compare the paint samples elevated and accepted this assignment. (vide pg873 to 881).

Margot Pierette Brusa (piece 37 at pg 653) stated that she was married to Olivier Brusa and that her husband was a fisherman/sailor for approximately 8 years and used to sail with the Klein Familie during this period. She did not know where the fishing grounds were located except that sometimes she used to hear her husband mention les Casquets. On the evening before the 5<sup>th</sup> of January, 2006 Olivier Brusa had boarded the Klein Familie where he had baited the hooks as usual after which he would sleep. She said that her husband never phoned her unless it was something important. She never got any news of him there after. The crew was made up of:

Franck Herouville, Ludovic Herouville, Olivier Brusa, Thierry Gouseslin and Jean-Michel Gueno.

She said that she received news of the sinking of the Klein Familie and gave a detailed description of her husband.

Nathalie Leblong-Marco wife of Goueslain stated that her husband Thierry Goueslain was fisherman/sailor for more than 10 years and was the Master of the Klein Familie for more than 2 years. She did not know where the fishing grounds were located. However Michel Menage captain of the Calypso would know because they always fished together. She confirmed the members of crew of the Klein Familie and that Goueslain had left the house at 04.00 hrs and was expected back in the afternoon. At about 10.30 hrs she received news of the sinking of the Klein Familie. She gave a detailed description of her husband Thierry.

Severine Louis, concubine of Ludovic Herouville, stated that at pg888 that Ludovic was a fisherman/sailor for ten years, five of which were spend on board of the Klein Familie which fished in the Casquets areas and off Jersey. He was a category four sailor. She gave details of the crew members, a detailed description of Ludovic himself and what he was wearing.

Marie France Langlois married Terpereau, mother of Frederic Terpereau stated that her son had received his Vocational training certificate from the Cherbourg aquatic college which he passed with distinction. He had joined the Klein Familie on the 1<sup>st</sup> of August 2005 as a sailor. He was single and childless. On Wednesday 4<sup>th</sup> January, Frederic left home at 23.15 hrs to bait the ropes prior to departure at 04.00 hrs. That day, she received no calls from Frederic and at 13.30 hrs of the 5<sup>th</sup> of January, she was informed that the Klein Familie had sank off the Hague. She gave a detailed description of her son's appearance and clothes that he was wearing.

Fabienne Langlet wife of Franck Herauville stated that her husband was a fisherman/sailor for the last 22 years and he had been on board of the Klein Familie since August 2005. She did not know the fishing grounds of the Klein Familie. She just knew that these were the vicinity of the Hague but that depended on the kind of fish they wanted to catch. Her husband never told her where they were going to fish but only spoke of a trip that would last two or three hours. In fact he didn't like fishing around the Cape of the Hague because he had had a bad incident in these waters. Franck preferred to fish on bigger trawlers. He left home at 23.15 hrs. He was always early and he had to bait the ropes before departure. She said that normally Franck would not call her while he was at sea except perhaps to inform her when he was returning. On the 5<sup>th</sup> of January at 13.00 hrs she was informed of the sinking of the Klein Familie. She gave a detailed description of his appearance and the clothes that he was wearing.

Didier Bazin-Laviou diver confirmed that on the 7<sup>th</sup> of January, 2006 he boarded the vessel Croix Du Sud and went on route to the position of the wreck of the Klein Familie. He took part in the dive, he noticed a flashing marker which flashed every two seconds.

Michel Castaing (piece 43 at pg1935) Captain of the vessel Croix de Sud confirmed the rescue mission on the 6<sup>th</sup> of January, 2006 at 05.00 hrs and the searches following the sinking of the Klein Familie. The tests that were effected by Echo. On the 7<sup>th</sup> of January, 2006, they had localized the Klein Familie.

Criminal Research Institute issued the results of the analysis of the samples of the paint from the wreck of the Klein Familie and the paint samples elevated from the hull of the Sichem Pandora, which analysis was carried out by experts Miller Stephan, Richard Gosse and Franck Parteuche. The results of their analysis are deliberated in section IA of this document.

Pg 952 to pg1087 are copies of the same piece 44.

Piece 45 and 47 are requisitions for the calling of interpreters.

Maria Goubry, Russian interpreter at pg1333 accepted her nomination as interpreter.

The faxsimile by the Registrar General of Shipping and Seamen, Lino Vassallo, requesting the detention of the Sichem Pandora of the 9<sup>th</sup> of January 2006, is exhibited at pg 1337.

Vasiliy Ogarkov with the aid of interpreter Maria Goubry released a second statement to the French Authorities (at pg 1338 et seq) when asked to make a spontaneous statement. Ogarkov expressed his sorrow for the five men who lost their life at sea. He explained that his watch was from 04.00 to 08.00 hrs; that he effected a change of route at 06.49 hrs to pass from 060° to 075°; that before the Third officer's watch he had to carry out an evasive action to avoid a fast flashing white light. He switched off from autopilot, told the AB to veer completely to the right. Then he took the binoculars and followed the mark with the naked eye. He could only see the light and nothing else as it was still dark.

He told his coxswain to return the vessel to course after he ascertained that the vessel reached a reasonable distance from the light. He maintained that there was no noise – “absolutely nothing” otherwise the crew of the Sichem Pandora, who were having breakfast would have heard. (vide pg1339).

He stated that the radar alarm system of the vessel was functioning. He said that an alarm went off 2 hrs before he made the zig-zag manoeuvre. This was when a vessel overtook him. He remembered seeing several fishing vessels on either side of the Sichem Pandora however these kept out of the way.

The Chief Officer stated that when he served in the China Sea, he carried out several evasive actions regarding poorly-lit fishing boats. He said that he was not aware of any damage to the hull of the Sichem Pandora. It was possible that these could have resulted during port manoeuvres.

Vasily declared that in the case of suspicious noise, he would have halted the engines, looked to see the vessel had touched anything and offer help and assistance and set procedures to save lives example put liferafts to sea etc.

He had no explanation for the green and red paint on the hull and he could not understand how they came about, in absence of any shock or ship vibrations.

He said that the lifebuoy emitted a light every two seconds but the light that he saw was very bright and flashing at a much faster rate (vide pg1342).

Captain Galyanov aided by interpreter Sarah Damie confirmed notification of the detention of the Sichem Pandora by the Maltese Maritime Authorities. He said that the stability of the vessel was such that the ship would not have registered any noticeable listing during the anti collision manoeuvre. Furthermore there was a slight swell and he was in his cabin having breakfast.

Moreover no member of crew reported such a movement. He confirmed the metrological conditions; that the ship's trim was 1.40 metres and the draft forward 4.10 metres; that night was bereft of moonlight; that the Chief Officer conversed with him in the Freight room at 09.00 hrs and did not mention anything regarding his watch of 04.00 hrs to 08.00 hrs.

Confronted with the results of the paint analysis of the two vessels, Captain Galyanov could not understand how a collision had taken place because his

crew would have stopped all engines, given assistance and informed the competent authorities.

- **“Q. What are the bulbous bow technicalities?**
- **A. Height: 6.40m. / “ice class 1” – which makes it reinforced; in addition, its shape is more oval than the standard model.**
- **Q. Is the fact that the paint marks (slightly slanting) present on your ship, running from fore-starboard of the bulbous bow to the stem propeller on the same side, not the result of a rapid starboard turn of your ship, which would have crashed into the drifter’s deck?**
- **A. Yes, this theory is rightly plausible and the strengthening of the bulbous bow would thus account for the fact that the crew on watch felt nothing whatsoever.**
- **Q. Bearing all the given point in mind, do you believe that your crew on watch simply avoided a buoy?**
- **A. But, of course! It was a normal reaction!**
- **Q. Why would such a rapid blow of the helm have been given starboard since the luminous buoy had already been spotted?**
- **A. In actual fact, at night-time, it is very difficult to gauge the distance of light, all the more of as we are talking of a fishing mark”.**  
**(vide pg 1344)**

Aleksandrs Belikovs was asked whether he could give the precise positions of everybody on the bridge at the moment of the manoeuvre. He said that he was at the back of the bridge near the windows where he has a view in all directions. Chief Officer Ogarkov were in front of the radar screen, there was nobody else on the bridge. His watch finished at 08.00 hrs. he stated that he noticed the flashing lights at about 07.45 hrs. He noticed the flashing lights which were at a distance of 1 to 2 nautical miles and he immediately gave the alert. It was the Chief officer who took the decision to take the vessel off autopilot and put it into manual.

The Chief Officer then ordered him to veer hard on the right, after to amidships and then back to course.

AB Belikovs stated that a manoeuvre hard to port or to starboard was not usual. Belikovs believed that the light that he saw was a fishing marker. After the anti collision manoeuvre the Chief Officer examined all around the vessel and then did not change course.

Gendarme Vincent Suchaut at pg1350 confirmed the receipt of certificates of competence of Vasiliy Ogarkov (pg1353) and of Aleksandrs Belikovs (pg1362) and of Captain Alexander Galyanov (pg 1365).

MDL Claude Jean Hubert (vide pg 1375) was given:

1. list of ships travelling in the Traffic Separation Scheme of the 5<sup>th</sup> of January, 2006 together with the destination (vide pg1377)
2. list of ships with the time and distance from the sight of the wreck of the Klein Familie (pg 1378)
3. the trajectory of the Sichem Pandora vis-a-vie the wreck and the liferaft of Jean-Michel Gueno.
4. the radar position of ships at 08.12 Zulu on 5 January, 2006.

Dominique Bertrand at pg 1379 elevated the DVD of the footage of the wreck of the Klein Familie.

A copy of the footage was consigned to the State Prosecutor of Cherbourg (piece 54 as pg 1381).

Federic Boudier at pg 1382 et seq was one of the divers who found the wreck of the Klein Familie on the 9<sup>th</sup> of January, 2006 which was at a depth of in excess of 60 metres. Boudier saw a lifeboat attached to the wreck; "three lights still on; two white flickering lights; starboard on the back bridge, another white flickering light at the fore of the wreck" and a fourth fixed yellow light on the same tube as the flickering white light at the fore of the wreck which he only noticed when reviewing the footage (vide pg 1383) He exhibited a sketch of the wreck at pg1384. Boudier elevated the life buoy salvaged from the wreck and consigned it to the State Prosecutor of Cherbourg (Vide pg1385/6).

MDL Claude Jean Hubert elevated the audio CD containing the recordings of the radio conversation from Cross Cherbourg and consigned it to the State Prosecutor.

Le Moan Yann vide pg 1392 stated that, as a Second Officer of the Maritime Affairs Technical and Administrative Corp. he inspected the Klein Familie on the 18 November, 2004. He mentioned the considerable works that had been undertaken by the Bernard Shipyard of St. Vaast La Hougue, and confirmed that the navigation certificate of the Klein Familie was extended to the 2<sup>nd</sup> of October, 2004.

On the 18 November, 2004, nine prescriptions were noted but none were serious enough to warrant the non renewal of the navigation permit. This was in fact renewed to the 5<sup>th</sup> of November, 2005.

At the moment of the impact, the Klein Familie did not have its navigation permit renewed. He forwarded the inspection report on the radio electric station, the report mentions a deficiency regarding the installation of a distress radio beacon which had to be rectified by the 1<sup>st</sup> of January, 2006.

Regis Duburquoy exhibited an extract of the International Convention for the Prevention of Collisions at Sea. (vide pg1394 et seq).

Daniel Goueslain, at pg 1401 to 1403, father of Thierry Goueslain stated that his son was a fisherman/sailor and owner of the Klein Familie. He last saw his son on the 4<sup>th</sup> of January, 2006 at 19.00 hrs when he was informed of the intended fishing trip, without knowing however the whereabouts of the fishing grounds. Daniel Goueslain was sure that the boat had no technical problems and was in good working order. The vessel's chandlery was purchased by Daniel Goueslain.

Patrick Sanlaville at pg1404, Director of Maritime Affairs Cherbourg stated that a vessel similar to the Klein Familie must hold two main documents ie. one concerning the boat and the other concerning the crew members. He confirmed that the navigational permit of the Klein Familie was expired but was in a position to exhibit the list of crew members of the vessel.

He said that there was a misunderstanding with regards to the status Franck Herouville on board the Klein Familie which however was ironed out by Deguerge and Madame Goueslain.

Public Prosecutor Garrandaux extended the inquiry for a further 8 day period (vide pg1417 till 1421).

Eric Margenest forwarded copies of the videos of the wreck of the Klein Familie, audio and video cassette of the Croix De Sud of the 9<sup>th</sup> of January, 2006, the video of the wreck by Argonaute of the 10<sup>th</sup> of January, 2006 and consigned them to the staff of B.E.A. mer together with copies of the statement of Gueno and the crew of the Sichem Pandora listed at pg1428 and 1430.

B.E.A.mer's request for the above mentioned documents may be seen at pg 1433 – 1437.

Captain Nicolas Chateau at pg1435 et seq confirmed that on the 11<sup>th</sup> of January, 2006 he took the second team of divers ie. Le Guen and Laine on board the Vulcaine to carry out the mission of recovery of the missing crew and to film the wreck. He confirmed that no bodies were found and the footage was recovered.

The declassification of and the authorization for the reproduction of the communication of the Vulcaine may be found at pg 1439 till 1352.

Julien Laine bomb disposable diver confirmed that he carried out a dive on the wreck of the Klein Familie and that he took the video footage together with Christophe Le Guen. This footage was handed over to the commander of the Vulcaine.

Christophe Dreano confirmed the dive of the wreck of the Klein Familie for the purposes of filming the same and verified the absence of bodies around the wreck. He found no orange paint marks on the hull. (vide pg1458 to 1460). An orange coloured flashing light was still flickering at the back of the wreck.

Seguin Olivier confirmed the dive with Christophe Dreano on the Vulcaine where they filmed the wreck of the Klein Familie (vide pg1461, 1462)

Christophe Le Guen confirmed the evidence of Julien Laine and the dive for the filming of the wreck of the Klein Familie (vide pg 1463/4).

This DVD was consigned to the State Prosecutor of Cherbourg (vide pg 1465/6).

The DVD of the wreck of the Klein Familie by means of the submarine Robot Ulisse on the vessel Argonaute, of the 11<sup>th</sup> of January, 2006 was consigned to the Public Prosecutor of Cherbourg (vide pg 1469 to 1474).

Philippe Aubriet (vide pg1475-1477) reported the manner in which the dive of the robot Ulisse was conducted. The specifications of the robot Ulisse stand at pg1480/1481.

Filipe Bousquet, Lieutenant, Head of the Engine Intervention Section of the Naval Action Force, Human Diving and Underwater Intervention Section confirmed his participation in the underwater filming of the Klein Familie by Robot Ulisse on the 10<sup>th</sup> of January, 2006 and the second dive on the 11<sup>th</sup> of January, 2006.

The report of the video of the dives stands at pg 1486/1487.

Vincent Lassourd at pg 1488 stated on the 17<sup>th</sup> of January, 2006 that the communication between Gueno and Cross Jobourg following the wreck of the Klein Familie was damaged due to a fault in the software. The possibility of the recovery of the communications of that date was being investigated.

Details of the air reconnaissance mission of the 5<sup>th</sup> of January, 2006 following the wreck of the Klein Familie stand at pg 1490 to 1494.

Michele Mesnage, stated at pg1495 et seq, owner of the vessel Calypso stated that he fished with the Klein Familie for 8 years. The vessels do not fish in the same grounds at the same time. The fishing boats were corders and could fish within a 20 mile limit from any shelter. Their usual fishing ground were the Casquets Scheme and North Cherbourg. He was first to leave around 04.00 hrs and saw all the crew of the Klein Familie except for Thierry. The Klein Familie left at 14.15 hrs / 14.20 hrs because Thierry called him on VHF and told him "he was "due down stream" which Mesnage took to mean the Traffic Separation Scheme (TSS). Mesnage declared it took 2½ to 3 hrs to reach the scheme and that he was in communication with Thierry till 06.15 hrs (vide pg1496).

Mesnage confirmed that Franck Herouville was a member of the crew of the Klein Familie. He said that Goueslain did not mention any navigational problems at all during his communication with him. Mesnage stated that in the TSS of the Casquets he sets his radar alarm at 1.5, he stayed alert and allows the vessels the right of way (vide pg 1495 to 1497).

He said that the Klein Familie was still coursing because the crew were still asleep. He said that Thierry had been in hospital one year previously because of a breathing problem. "but all was fine ever since". (vide pg 1498).

The Helicopter mission report was filed at pg 1499 by Michael Tonneyck. He said that he examined the vessel. Pioner Belorussie which had a black mark on

its fore starboard side; the vessel King Fisher had no visible marks and the Sichem Pandora had no obvious marks of recent collisions.

Regis Duburquoy at pg 1502/3 consigned the digital cassette containing arial photographs to the State Prosecutor. (vide pg 1504 and pg 1505, the photo dossier piece 84 and 85 in the French Proces Verbal).

At pg 1508 B.E.A. mer requested the State Prosecutor for a list of documents that appear at pg 1508.

Jean Luc Jacquelin at pg 1510 stated that he had sailed with the Klein Familie from 2002 to 2004 which worked concurrently with Mesnage's vessel, the Calypso. The vessels fished separately but each day the catch was pooled to share the sales.

The fishing grounds in the Traffic Separation Scheme were between 2 hrs and 4 hrs away from Cherbourg. However when the voyage was to be 4 to 5 hrs, the sailors baited on board as they travelled.

All sailors had to be on the quay 4 hrs before departure.

Jacquelin stated that Thierry always stood on the bridge. He never slept, however would arrived late the next morning.

He always set the anti-collision alarm at half a mile. He said that Goueslain had no health problem except that he was slightly over weight. He believed that Thierry was proceeding to the Traffic Separation Scheme. He said that the flickering light was placed at the end of the coil of rope. Since the Klein Familie had not yet rolled out the ropes, the lights were still on the vessel. He said that fishing vessels signal their position to cross everytime they enter or exit the Traffic Separation Scheme. Jacquelin said that Thierry was a excellent sailor and a serious, vigilant man (vide pg 1513).

### **3. Formal Maritime Inquiry**

The Court together with its assessors travelled to France where they conducted an inspection of the vessel Sichem Pandora and heard all the relevant evidence.

Captain Alexander Galyanov at 264 et seq, duly cautioned, confirmed that he was the Master of the Sichem Pandora as from the 27<sup>th</sup> of November, 2005 to the 9<sup>th</sup> of January, 2006. He stated that he had three officers i.e. a Chief officer: a Second officer: and a Third Officer who acted as watch keepers.

The Third officer's first watch was from 08.00 hrs to 12.00 hrs and his second watch from 20.00 hrs to 24.00 hrs. The Second Officer's first watch was from 12.00 hrs to 16.00 hrs and 24.00 hrs to 04.00 hrs and the Chief's Officer's first watch was from 04.00 hrs to 08.00 hrs and his second watch was from 16.00 hrs to 20.00 hrs.

Captian Galyanov stated that the ship was certified unmanned machinery space and that the Engine room was not manned but was automated and the alarms were all recorded on board. The vessel was manned by two engineers who were on duty every alternative day.

He said that the Sichem Pandora had proceeded from Safx in Tunisia on the 28 of December, 2005, bound for Flushing with ETA time 6.00 on the 6<sup>th</sup> of January 2006. The vessel was not travelling at maximum speed. P & I for the vessel were Guard Services. Captain Galyanov stated that the engine room alarms were reported and printed.

Aleksejs Bogackins at pg267 et seq, the cook on board of the Sichem Pandora stated on oath that he started work at 5.45 am on the 5<sup>th</sup> of January, 2006. The weather conditions were good and breakfast was served from 7.30am to 8.30am. Bogackins was not sure whether Chief officer Vasiliy came down for breakfast between 06.00 am and 08.30 am. Bogackins stated that he normally stood up when preparing or cooking food. He stated that from the galley he did sometimes feel the ship's movements. On the 5<sup>th</sup> of January, however he felt no sharp movements and though he could hear the ship's alarms from the galley, on the 5<sup>th</sup> of January, he did not remember hearing any alarm.

Bogackins stated that though he had experienced the ship's movements when the ship was altering course, on the 5<sup>th</sup> of January, 2006 he did not feel that the ship changed direction at any time. At pg271 he states however "I don't remember may be in this moment I don't remember". Bogackins confirmed on oath the statement he gave to the Inquiring officer during the informal inquiry.

Aleksandrs Belikovs, Able seaman on board of the Sichem Pandora at pg273 et seq, having been duly cautioned stated that he boarded the vessel on the 4<sup>th</sup> of November, 2005 as an Able Seaman. It was his third contract, but his first time with the company and the vessel. He stated on oath that his watch of the 4<sup>th</sup> of January, 2006 started at 04.00 hrs to 08.00 hrs and his second watch from 16.00 hrs to 20.00 hrs. Weather conditions were normal, no storms, no pitching or rolling and the visibility was normal.

After his rest, Belikovs stated that he woke up at 03.30 hrs on the 5<sup>th</sup> of January, 2006 and was on the bridge by the 03.57 hrs. He said that he had a look out forward and left the bridge. At 05.00 hrs and 07.00 hrs he had to take fire patrols in the super structure. These patrols lasted approximately 15 minutes each and he was back on the bridge. Between 07.15 hrs and 08.00 hrs, the ship made a manoeuvre. Belikovs explained that he saw a white flashing light at forward about 5 ° to port.

Belikovs drew a sketch of the bridge of the Sichem Pandora Dok BA and marked the position he was in when he saw the light. He calculated that the flashing light was about one mile away when he first saw it. The Chief officer was standing near the starboard radar and instructed him to switch from autopilot to manual. (pg 276) and told him to steer "hard to starboard" in Russian. After three seconds he put at 30 ° then 20 °, then to amidships according to the Chief Officer's orders until they were back on their previous course.

He did not look at the flashing light during the manoeuvre, however after he went to the port quarter and saw the light. Belikovs marked in black as number2, the position he was in when he saw the light. At that stage, the flashing light was at a point marked X on the sketch Doc BA. The whole manoeuvre took around three to five minutes to complete (vide pg281).

In cross-examination, Belikovs stated that it was still dark when he first saw the flashing light and thought it was a fishing marker. This was the only flashing light Belikovs saw in his watch. Belikovs confirmed the statement he made to the inquiring officer in the Informal Inquiry, (Doc AC38 which he confirmed on oath after the statement was read out to him), except for the fact that the ship had not yet passed Cherbourg.

Belikovs remembered that when the ship altered course hard to starboard, he ship heeled a bit to one side (vide pg284). At the end of his watch, at 08.00

hrs, Belikovs stated that the Chief Officer, Bosun, the Third Officer were on the bridge.

The Third Officer was to relieve the Chief Officer. Belikovs stated that he did not hear them say anything of relevance in the handover.

Chief Officer Vassily Ogarkov at pg288 et seq, after being duly cautioned, stated that he took up position as Chief Officer of the Sichem Pandora on the 21<sup>st</sup> December, 2005. It was his first time with the company and on the vessel. He had 11 years experience as Chief Officer. Vassily stated that on the 5<sup>th</sup> of January, 2006 he started his watch at 04.00 hrs to 08.00 hrs. His second watch was at 16.00 hrs to 20.00 hrs. He was also Cargo officer, administrative and executive officer. He stated that the previous night he had finished his watch at 20.00 hrs and rested.

At 03.50 hrs of the 5<sup>th</sup> of January, 2006, he was at the bridge to take over the watch. At the time, the Sichem Pandora was approaching the Traffic Separation Scheme. He reported this: everything was normal: weather and sea were moderate and visibility was approximately 7 miles (vide testimony pg 291).

At around 07.50 hrs, the Chief Officer observed a flashing light a few degrees to Port . He therefore instructed the AB Belikovs to go hard to starboard. He said that he had at first, thought it was a fishing buoy and saw it approximately one mile away and when the ship was 20 °/25 ° to starboard he ordered the AB to midship and then back to the ship's previous course.

He executed a sketch Doc OV and marked as number 1, his position when he first saw the marker, A where he saw the flashing light and B (an intermittent light) the course he took to avoid the flashing light.

He believed that the flashing light was a fishing buoy (vide testimony at pg293). He confirmed that the AB was on the bridge when he saw the flashing light. The Chief Officer marked with a letter X the position of Belikovs on the bridge.

After the manoeuvre, the Chief officer looked through the binoculars to observe the light. The Chief Officer stated that he effected the ship's manoeuvre between 07.50 hrs and 07.55 hrs because at this time, the Third Officer came to the bridge to start his watch (at pg295).

The Chief officer stated that at this time, the closest vessel was more than two miles away (pg296). The Chief officer was shown Doc AC63 and confirmed that it was his handwriting. He confirmed that he entered the Traffic Separation Scheme (TSS) at 06.49hrs.

At pg299, after repeated questioning by the assessors and the Court, the Chief Officer confirmed that the ship's manoeuvre occurred at 07.50 hrs.

**The Chief Officer stated that during his watch, he saw several fishing boats on his port side.**

In cross examination the Chief Officer stated that the course recorder was set on UTC. Therefore 0700hrs on the course recorder would translate to 0800hrs ship's time. Furthermore the course recorder was 10 minutes fast so that the manoeuvre being shown at 0700hrs on the course recorder **in fact happened at 0650hrs UTC or 0750hrs ship's time.**

The Chief Officer stated that the entire manoeuvre took 5 minutes to complete and that during this manoeuvre the ship did not list. (vide pg305).

At this time, the Sichem Pandora was in ballast. The Chief Officer confirmed on oath the statement he gave to the inquiring officer, Alfred Cremona at the informal inquiry (Doc AC24) and identified his signature on the same document.

In cross-examination, the Chief Officer confirmed that all radars, alarms, were working throughout his watch. He confirmed that the alarms were set off if a vessel approached within a two mile radius of the Sichem Pandora.

The Chief Officer stated that when the Third officer came on the bridge he saw the white flashing light on the port quarter and the Chief officer advised him to be careful. C.O. Vassiliy exhibited sketches Doc OV, OV1 and OV2.

Captian Galyanov at pg 312 stated on oath that he held the position of captain for three years and had been Master of the Sichem Pandora for 2 years. Captain Galyanov exhibited the ship's certification and documentation i.e. the following:

- Doc GA 1 - shadow zone of the Sichem Pandora;

- Doc GA 2 - Manouvering data of the Sichem Pandora;
- Doc GA 3 - Class Status Report;
- Doc GA 4 - Certificate of Registry;
- Doc GA 5 - Safety Management Certificate;
- Doc GA 6 - International Ship Security Certificate;
- Doc GA 7 - Document of Compliance;
- Doc GA 8 - International Tonnage Certificate;
- Doc GA 9 - International Load Line Certificate;
- Doc GA10 - Safety Equipment Certificate;
- Doc GA11 - Records of Equipement for the above Certificate;
- Doc GA12 - Safety Construction Certificate;
- Doc GA13 - Safety Radio Certificate;
- Doc GA14 - Record of Equipment for above Certificate;
- Doc GA15 - Ship Station License;
- Doc GA16 - International Oil Pollution Certificate;
- Doc GA17 - Sewage Pollution Prevention Certificate;
- Doc GA18 - Certificate of fitness for carriage of dangerous chemicals in bulk;
- Doc GA19 - Classification Certificate;
- Doc GA20 - Double Hull Declaration;
- Doc GA21 - Minimum Safe Manning Certificate;
- Doc GA22 - Certificate of Entry;
- Doc GA23 - Last report of Inspection;
- Doc GA24 - Ship Emergency Response Service Certificate;
- Doc GA25 - Master's Standing Orders;
- Doc GA26 - Vessel's Main Particulars;
- Doc GA27 - Bridge layout;
- Doc GA28 - Bridge Order Book – 05/01/2006
- Doc GA29 - Bridge Order Book – 02/12/2005
- Doc GA30 - Bridge Order Book – 06/12/2005
- Doc GA31 - Bridge Order Book – 10/12/2005
- Doc GA32 - Bridge Order Book – 14/12/2005
- Doc GA33 - Bridge Order Book – 16/12/2005
- Doc GA34 - Bridge Order Book – 18/12/2005
- Doc GA35 - Bridge Order Book – 19/12/2005
- Doc GA36 - Bridge Order Book – 20/12/2005
- Doc GA37 - Bridge Order Book – 28/12/2005
- Doc GA38 - Bridge Order Book – 31/12/2005
- Doc GA39 - Bridge Order Book – 01/01/2006
- Doc GA40 - Bridge Order Book – 04/01/2006



- Doc GA41 – A list of the ship's certificates of the Sichem Pandora

At pg315, Captain Galyanov gave the weather conditions of the evening of the 4<sup>th</sup> of January, 2006, he said there was "good visibility, cloudy ... and the sea was approximately one metre and one and a half feet". He did not consider the vessel as a very manoeuvrable ship, however it had good stability. He said that he went to sleep at midnight after the second officer took his watch and got up at around 08.00 hrs.


○ There had been no calls during the night. Around 08.30 hrs he was on the bridge to check the charts, and radars, to see if there was anything reported and checked the correspondence from the company. There was nothing out of the ordinary. The Master said that thereafter he spoke to the Chief officer regarding the samples of the wallwash test of the tanks in preparation for the new cargo. (vide pg 317).

The Master also had to prepare the documentation and salaries of three crew members i.e. Rudenko Aleksey, Losunov Oleksandr, Zdanovics Aleksandrs, who were signing off at Flusing. Captain Galyanov stated that he had the first indications that something was wrong when he received orders to proceed to Dunkirk.

○ The Captain, at first, believed that this was in connection with an incident that had happened earlier where a fishing vessel had intercepted his course in violation of the rules of the Traffic Separation Scheme (vide pg319). Galyanov stated that a helicopter had flown over with search lights and a boat with search lights seemed to be investigating a pollution contravention. Galyanov stated that it was only when the Dunkirque pilot boarded the vessel at 01.00 hrs that he discovered that the investigation regarded a collision with a fishing vessel and that they were under investigation from the French authorities.

Galyanov said that the Chief Officer had been on board for just two weeks. He said that the second officer was in charge of the upkeep of the equipment on the bridge. He said that the course recorder was adjusted for time but not accurately so, since it was mechanical and not electronic.

Galyanov confirmed the course recorder Doc AC62 and that the ship's course was 60° between 01.00 and 06.00 UTC; 75 ° between 06.00 UTC and 07.00 UTC and confirmed that **it should read 10 minutes before ( 10 minutes fast).**



Between 06.45 and 07.20 UTC, the trace recorder showed that the vessel turned to starboard up to 110 ° at 07.50 which was 6.50 UTC. (vide testimony at pg 323 and 324).

This was a sudden alteration of course, and the return to course was as sudden, so that the entire manoeuvre took around three to four minutes to complete. (vide pg324).

At this time, Captain Galyanov was asleep in his cabin. He testified that he did not noticed the ship's movement, did not feel any vibrations, did not hear any alarms.

Captain Galyanov confirmed that statement that he gave to the inquiring officer on the 12<sup>th</sup> of January, 2006 after the statement was read out to him. He corrected that testimony however in the sense that his reference to the "second officer" had to read the "Chief Officer".

At pg326 he described an incident were a fishing vessel crossed the separation scheme at 20.00 hrs on the 5<sup>th</sup> of January, 2006, which he had erroneously believed to have been the incident that the French authorities were alluding to.

In cross-examination, Galyanov confirmed Doc GA40 i.e. his night orders of the 4<sup>th</sup> of January, 2006 (vide pg327), these included orders for a proper look out: keeping the vessels position in course line and inside the recommended Traffic Separation Scheme: use of both radars at night: area scales to be taken with time small targets: keeping radar watch.

Galyanov confirmed that all the bridge equipment was functioning properly, all navigational lights were operational with one system of lights working and another one stand by.

Galyanov stated that his vessel did not come into contact with any vessel or craft and that the only explanation for the green paint on the Sichem Pandora was that this paint could have been the result of the vessel rubbing against the wreckage. (Vide pg329).

Galyanov confirmed that the fishing vessel the Klein Familie had a freeboard of about one metre and yet the green paint was found at two or three metres below the water line of the Sichem Pandora.

Artjoms Koldovs at pg398 stated that he worked in the mess as an OS. On the 4<sup>th</sup> of January, 2006 he finished work at 19.30 hrs and retired. He woke up at 06.20 hrs and started preparing breakfast which is served at 07.30 hrs. He did not remember any strange movements of the ship, did not hear any alarms, did not notice any alteration in the ship's course. He did not remember seeing any lights when he looked out of the window. He did not remember seeing the Chief Officer for breakfast but he remembered that the Bosun, the motor man and Able Seaman Belikovs had breakfast.

Sergey Rudich, Third Officer on the Sichem Pandora gave evidence on oath assisted by a duly sworn interpreter Paul Belopolsky at pg401 gave his rank on the Sichem Pandora which he started on the 25<sup>th</sup> December, 2005. On the night of the 4<sup>th</sup> of January, 2006, he slept at 24.00 hrs and was on watch again at 08.00 hrs on the 5<sup>th</sup> of January, 2006. He woke up at 07.30 hrs had breakfast but did not hear or noticed anything unusual. No ship vibrations, or unusual ship movements or large alterations of course.

When he arrived on the bridge at 08.00 hrs the Chief Officer informed him that he had altered course. The ship however was already on its proper course when Rudich began his watch. Rudich checked the radar screens, the VHF screen and executed visual checks.

There were no targets within the guard ring on the radar i.e. a three mile radius. He said that the Chief Officer "as a matter of fact" told him that he changed course because of a buoy. (vide testimony at pg 403 and 404).

The Third officer stated that he did see a flashing light which he also believed to be a fishing buoy, approximately three miles away. He said that the Arpa was set to leave the trails of vessels. There were no vessels on the radar, and no ships' trails. The watch finished uneventfully.

Rudich stated that his second watch was from 20.00 hrs to 24.00 hrs were the vessel was travelling in the Traffic Separation Scheme. When he arrived on the bridge, the Chief officer told him that they were being followed. The Master arrived on the bridge, a fishing trawler crossed their course from port side to stern. They were called by Traffic control to proceed to Dunkirk and board a pilot.

Rudich confirmed that when he was on the bridge at 08.00 hrs on the 5<sup>th</sup> of January, 2006, the Sichem Pandora was on automatic pilot. Rudich confirmed on oath, the statement he gave before the inquiring officer Cremona i.e Doc AC33 after this was read out to him.

He exhibited the sketch document SR.

In cross-examination Rudich said that he did not mention seeing the flashing buoy to the inquiring officer because he was not asked about it. (vide testimony at pg408).

Aleksey Rudenko (at pg409 et seq) the Second Officer on the Sichem Pandora after being duly cautioned, testified on oath that on the night between the 4<sup>th</sup> and the 5<sup>th</sup> of January, 2006 he was on watch from 24.00 hrs to 04.00 hrs: his watch was normal proceeding in the Traffic Separation Scheme. There were many fishing vessels and cargo vessels. He was relieved from duty at 04.00 hrs by the Chief Officer and AB Belikovs to whom he gave a normal hand over.

He left the bridge at 04.15 hrs and went to rest. He was back on the bridge at 16.00 hrs and remembered that a small boat was approaching on the starboard side. They tried to contact this boat to no avail. (vide pg411).

The boat switched on the search lights at the ship's stern. At 18.30 hrs he left the bridge. He went back on watch at 23.30 hrs and was told to proceed to the pilot buoy (vide pg412).

The statement Document AC26 was read out to Rudenko who confirmed the said on oath.

In cross-examination Rudenko confirmed that all navigational equipment was working including the radar, arpa, navigation lights, and course recorder. There were no alarms on any of his watches.

In re-examination, Rudenko stated that he adjusted the time of the course recorder everyday at 12.00 hrs but was not sure of having done this on the 4<sup>th</sup> of January, 2006.

Frederick Restello, with the aid of the interpreter Albert Conch, duly sworn in, testified on oath that he was a Surgeant, law enforcement officer and technician in underwater investigations in the district of Calais Nautical Police.

On the 6<sup>th</sup> of January, 2006, he was instructed to proceed to Dunkirk to carry out underwater investigations on the hull of the Sichem Pandora. Together with members of his squadron, and a technician, duty gendarme in charge of security and logistics, they took a sub-aqua video of the hull of the vessel.

Besides the video, they elevated three samples of the anti-fouling paint, green paint and the yellow paint from the hull of the Sichem Pandora. The samples were taken according to the instructions given by Monsieur Marjenest and the technical Borquoi. All three samples were elevated from the starboard side of the bulbous bow aft to the bow thrusters.

The first sample was taken at 1.50 metres below sea level. The second sample was taken at 2.80 metres below sea level, and the third sample at 1.80 metres below sea level.

When the samples were taken, Restello did not measure the draft of the vessel. Paul Gregory, and Willocq Hugo, through the interpreter Albert Conch confirmed their participation in the underwater investigation of the hull and the taking of samples, together with the filming of the video.

Condette Yohani through the interpreter Albert Conch gave evidence on oath stating that he was in charge of the security of the diving team that had investigated the hull of the Sichem Pandora.

Ladislav Gross at pg433 to 435, Able Seaman on board of the Sichem Pandora, testified after being duly cautioned that he had been on board of the vessel for three months, serving his first contract with the ship. His last watch on the 4<sup>th</sup> of January was at 12.00 to 16.00 hrs, rested at 20.00 hrs and was on bridge at 23.55 hrs for his watch which lasted till 04.00 hrs. The watch was normal and uneventful.

He went to sleep and woke up at 11.30 hrs on the 5<sup>th</sup> of January, 2006. He did not feel the ship lurching at any time.

Vitalys Vasilyer at pg 436, duly cautioned stated that he was Bosun on board of the Sichem Pandora but had worked a previous contract on a sister ship. On the 4<sup>th</sup> of January, 2006 he was on watch between 20.00 hrs and 24.00 hrs. The watch was normal and uneventful.

On the 5<sup>th</sup> of January, 2006, he woke up at 07.00 hrs, went on the bridge at 07.57 hrs and found everything normal. He did not know that the ship had altered course. When on the bridge, he noticed two ships to the left about 3 or 4 miles on the port bow and two vessels astern. The Chief officer and AB Belikovs were on the bridge.

He heard no conversations about a ship manoeuvre between the Third Officer and Chief Officer nor did Belikovs speak of this manoeuvre with him.

Chief Officer and the Third Officer were at the Chart table when he went on the bridge (pg439).

Fitter Zavoronko Valerijis at pg440 testified that he boarded the Sichem Pandora on the 21<sup>st</sup> December, 2005 and this was his first contract. He worked from 08.00 hrs to 17.00 hrs in the engine room. On the 5<sup>th</sup> of January, 2006, he woke up at 07.10 hrs. He did not feel any ship movements between 07.45 hrs and 08.50 hrs. He did not hear any strong vibrations. Valerijis stated that he had, in the past, been involved in a collision at sea where the noise of the impact was tremendous. Had there been contact with a fishing vessel, it would have been impossible not to hear.

Chief Engineer Mikulchik Vladimir at pg442 et seq on oath confirmed his position on board the Sichem Pandora. He was in the engine room at 06.00 hrs on the 5<sup>th</sup> of January, 2006, checked the engines, auxiliary engines and boilers and found everything normal. After his checks, went back to the cabin for 1½ hrs, breakfasted at 07.30 hrs and went in the engine room at 07.50 hrs. He stated that the engine was on shaft generators. Chief Engineer states that he registered no abnormalities before 08.00 hrs and no alarms were triggered

The date of recorded alarms for the 4/5 of January, 2006 was exhibited and marked as Doc MV.

Chief Engineer confirmed that the Maltese Assessor Chief Engineer Joseph Amato requested him to effect tests to ensure that the system of alarms actually worked and that the positive results of this test on the alarm system was exhibited at Doc. MV1.

At pg449, Chief Engineer Mikulchik Vladimir exhibited the copies of the Engine Room log book of the 4<sup>th</sup> of January and of the 5<sup>th</sup> of January, 2006 as Doc MV2 and MV3.

Captain Galyanov reproduced testified that they arrived at Dunkirk at 04.10 hrs to 05.50 hrs. Captain Galyanov did not remember whether he had at any time ballasted or deballasted the vessel or changed the trim. However he believed he tried to pump out on the 8<sup>th</sup> January, 2006. However between the 5<sup>th</sup> and the 8<sup>th</sup> of January, the draft of the vessel remained the same. He said that he was aware of the diving inspection carried out and that the ship's draft remained the same.

The 2<sup>nd</sup> Engineer Igor Baran on oath testified at pg454 after having been duly cautioned stated that he held the position of 2<sup>nd</sup> Engineer for two months on the vessel Sichem Pandora and that his working day was between 08.00 hrs and 17.00 hrs and every other day he was on duty for 24 hrs from noon to midnight.

On the night between the 3<sup>rd</sup> and 4<sup>th</sup> of January, 2006, Baran was on duty whilst on the night between the 4<sup>th</sup> and 5<sup>th</sup> of January, the Chief Engineer was on duty.

On the morning of the 5<sup>th</sup> of January, between 07.00 hrs and 08.30 hrs he did not feel any unusual ship movements, did not feel the ship's change of course and did not feel any vibrations.

He did not hear any conversation regarding traffic movements of other vessels between the Master and the Chief Engineer or the AB. (vide pg456).

Captain Galyanov at pg 457 exhibited two plans of the bridges of the Sichem Pandora i.e. Doc GA42 at pg459 and GA43 at pg460.

He confirmed that the draft of the vessel on arrival Dunkirk on the 5<sup>th</sup> of January, 2006 was 4.10 forward and 5.6 aft, a computerized calculated measurement (vide pg457).

Bundins Vjaceslavs at pg461 et seq duly cautioned at pg 431, stated that he worked as an oiler on the Sichem Pandora since the 21<sup>st</sup> December, 2005. He stated that on the 4<sup>th</sup> of January, 2005 he finished his work at 20.00 hrs and slept at 23.00 hrs. On the 5<sup>th</sup> of January, 2005 he woke up at 07.20 hrs / 07.25 hrs and went for breakfast and was in the engine room at approximately 07.50 hrs / 07.55 hrs. He did not notice any unusual ship's movements, any change

of course, did not hear any vibrations, or heated discussions, or quarrelling (vide pg462).

Barliff Thierry Doco at pg463 exhibited a report Doc TD1, a video TD2, produced by the crew of the Sichem Pandora, TD3 a sample of metal, TD4 and TD5 white paint samples and TD6 green paint samples.

Bruckert Gernard at pg474 and Fabrice Reguier at pg477, sub-aqua divers confirmed that on the 12<sup>th</sup> of January, 2005 they were asked to conduct an underwater inspection of the hull of the Sichem Pandora, video it and extract samples.

None of these samples were submitted for analysis by experts nominated due to the fact that the samples were not elevated by the Judicial Police of France or by Maltese Scene of the Crime Officers and therefore were not according to procedure.

On the 26<sup>th</sup> of January, 2006 at the Palais de Justice, Cherbourg France, the Court and its Assessors through the procedures of the Letter of Request heard several witnesses.

Admiral Edouard Guillaud (vide pg 2885) stated that the part of his dual responsibility was the safety of life at sea. At the Centre Regional Operationel de Surveillance et de Sauvetage (Cross). He was informed of the firing of the red flares by the Director of Cross (Herve Goasguen) and Officers Averty, Cadic and Thomann.

Le Guen, Dreano, Laine, Seguin were officers, divers in the underwater mission. Houllier and Le Guern were administrators for Cross Jobourg. These were the persons involved in the operation of search and rescue.

Herve Goasguen, (vide pg 2888) Director of Cross stated on oath that he was the Director of the Centre Regional Operationel de Surveillance et de Sauvetage (Cross). He explained the dual responsibility of the Centre:

1. Maritime Rescue Coordination (MCRR)
2. The Surveillance of Traffic in the Traffic Separation Scheme.

He explained that at the time of the incident, Charles Averty was the duty officer whilst he (Goasguen) started his duty at 08.04 UTC. At this time, Averty had been informed of the red flares sighted by the Alblas and the Steins at 07.48 hrs. Cadic and Thomann were watch officers, whilst Houllier and Le

Guern worked in administration and conducted searches on their information system. Goasguen did not speak directly to Jean-Michel Gueno.

At 08.46 hrs, following the rescue of Jean-Michel Gueno, Cross received information of the sinking of the Klein Familie. He confirmed the radar images ie piece 106 which was requested by the Informal Inquiry Officer, Alfred Cremona.

Goasguen stated that there existed no radar images of the Klein Familie because this vessel was only 14 metres long, was made of wood and therefore did not show up on radar. He confirmed that Jobourg Traffic had an International obligation to survey maritime traffic in a 25 nautical mile section of the Traffic Separation Scheme in the English Channel.

Each vessel had to report to Cross on entering the TSS, state the name of the vessel, its position, and any dangerous cargo on board. This information was fed into the data system and each vessel was tagged and numbered.

The number of the Sichem Pandora was 199:

The number of the Alblas was 228:

The number of the Steins was 234:

When the vessels refrained from identifying themselves, Jobourg traffic would order air assistance of a helicopter which would transmit the required information by VHF.

Goasguen stated that in very calm weather conditions, the Cross radar picked up signals of fishing vessels of under 15 metres. These were not the weather conditions obtaining on the 5<sup>th</sup> of January, 2006.

Goasguen came to the conclusion of the involvement of the Sichem Pandora in the sinking of the Klein Familie by the use of the information gathered by Cross and the information given by the survivor Gueno.

The survivor Jean-Michel Gueno had informed them that he had been on the liferaft for about 35 and 45 minutes and that the impact had taken place about 30 minutes before daybreak. Therefore the Jobourg search was narrowed down to activities in the TSS between 06.00 hrs and 07.48 hrs.

Using the twin information system ie the radar and the obligatory reporting in the TSS, they had the totality of vessels that could have been implicated in the incident. In fact he confirmed the list of vessels in piece 106 of the French Proces Verbal.

From the list of 12 vessels, 3 vessels were closely indicated ie the Pionier Bellaroussie, the ID Contender and the Sichem Pandora, however it was only the Sichem Pandora who had effected a significant change of course (30°) in a span of 6 minutes.

He confirmed that Port State Control Inspections (Paris MOU) were carried out on all 12 vessels. Goasguen indicated piece 5 of the French Proces Verbal gave the obtaining sea currents on the date in question. He said that the only information regarding the Klein Familie was the position of the wreck.

Jean-Michel Gueno did not speak to the crew of the Alblas because they were English speaking.

Jean-Michel Gueno at pg 2901 et seq gave testimony before this Court in France. He said that he was 19 years old and had been fishing for 9 months, was in the employment of Thierry Gouseslin of the Klein Familie, a 14 metre wooden fishing vessel painted light green, white and red.

He confirmed an image of the Klein Familie ie at piece 21. He confirmed the names of all the members of crew on the Klein Familie which departed from Cherbourg at 04.15 hrs. He said that the Master Thierry was on the bridge, another was securing objects on the vessel because the sea was rough. The other members of crew went below deck to sleep.

He did not remember the lights that the vessel Klein Familie carried on the day in question. After he went to bed, he was woken up by a loud noise and thrown out of bed. He found himself in the water with Olivier Brusa who had been on deck.

The only part of the Klein Familie visible at that point was the antenna above the bridge. Although the Klein Familie had an autopilot mechanism, Gueno did not know whether it was being used at the time of the incident. He did not know whether there was a man overboard distress system on the Klein Familie.

Gueno did not know whether the Master had used the radar circle when entering the zone. Jean-Michel Gueno was not wearing a watch on the date of the incident and calculated time vis-a-vis daybreak.

When he surfaced after the impact, he saw a large vessel with pipes on deck which he perceived from the back starboard position (vide pg2908).

He said that he swam toward Brusa for about 5 to 10 minutes before the liferaft self inflated and he exhibited sketch Document JMG. He stated that when he surfaced this vessel was approximately 20 metres away from him and around 10 to 15 metres away from the bridge of the Klein Familie. Gueno stated that there were no lights on the liferaft but that he had retrieved a distress flashing light which had been located in the front part of the Klein Familie. He tried to use the light to attract passing vessels, one of which seemed about a 100 metres away.

He said that the Klein Familie had only one liferaft and that after impact it sank in 2 or 3 minutes. (vide pg2911). He said that he could have spend between 2 to 3 hrs in all before being rescued. When Thierry Gouseslin arrived on board the Klein Familie at 04.15 hrs, he did not look tired and he was not sick.

He confirmed that before he slept, he smoke a cigarette: that there was a gas cylinder on board which functioned well: and that there was no explosion on board the vessel. (vide pg2912).

He said that in the 9 months on board of the Klein Familie, he did not recall any close encounters with large vessels. He confirmed the statement he gave to the inquiring officer after it was read out to him. (Doc AC21) and clarified the fact that Brusa helped out in mechanics but was not a mechanic. He gave details of the crew's rest periods in June, during Christmas time and stated that Thierry Gouseslin did not allow any alcohol or drugs on board the vessel.

He confirmed that he had this flash memory of a vessel with pipes. However, due to his "confused" state, he did not give it importance.

Admiral Lionel David Houllier at Cross Jobourg stated that he was present on the bridge during the rescue operations effected by the Director and officers on duty on the 5<sup>th</sup> of January, 2006 (vide pg2916 et seq) and gave an overview of the operations.

Tanguy Leguern stated that he was Second Master at Cross Jobourg and duty officer on the 5<sup>th</sup> of January, 2006 between 06.00 UTC and 12.00 UTC in the section of traffic surveillance and were in constant communication because of the mandatory reporting into the TSS. He confirmed the message of the vessel Alblas at 07.48 UTC and the communication was transferred to channel 68. He confirmed piece 5 and piece 106 and confirmed that he effected the enlarged images of the VTS sequences. He confirmed that he had no contact by VHF with the Sichem Pandora and no report from the Klein Familie that it was passing through the TSS and neither was there any distress call from the Klein Familie on Channel 13.

He stated that the Klein Familie normally did not identify itself when entering the TSS and in fact similar fishing vessels rarely did so. However fishing trawlers always did. The change of course effected the Sichem Pandora did not show up on the radar because it was a manoeuvre that was completed in a very short span of time. He did not know the time differential of the radar's coverage.

Radar reflectors on small vessels help the detection on radar only in the summer periods. There was no obligation on the part of small fishing vessel to notify Cross Jobourg on departure or on crossing TSS.

Christophe Le Guen, Naval officer at Cross Jobourg confirmed that he was responsible for the group of divers who effected the two underwater dives on the wreck of the Klein Familie the first for the search of the missing crew members and the second for the filming of the wreck.

He confirmed that he together with Dreano, Laine and Seguin were the divers and that he together with Laine took the videos. He confirmed the dossier of photos piece 84 and piece 25 of the French Proces Verbal.

He confirmed that at a depth of the wreck there were no currents.

The testimony of the witnesses Guillaud, Goasguen, Gueno, Houllier, Tanguy Le Guern, Christophe Le Guen, in the French language were exhibited. At pg 2933A, Doc AG1, 2 and 3 were exhibited through the Attorney General containing the French version of all the testimony of Frederic Rastello, Paul Gregory, Willocq Hughes and Yohann Condette.

Anthony Mangion at pg 2935 et seq on the 22<sup>nd</sup> of May, 2006, Registrar of ships with the Merchant Shipping Directorate Malta Maritime Authority exhibited Doc AM, the transcript of the Register of the Sichem Pandora dated 22<sup>nd</sup> December, 2005 when the vessel was provisionally registered in Malta and thereafter permanently registered in Malta on the 20<sup>th</sup> of March, 2006.

Anthony Mangion exhibited Doc AM1 to AM13, the documentation connected with the registration, AMX1 to 31 is the technical documentation of the vessel and Doc AMY1 to 15 the continuous synopsis record which a vessel keeps on board showing the continuous history of the vessel.

Stephen Camilleri, Flag and Port Control Inspector exhibited Doc SC1 to 14, the documentation necessary for the endorsement attesting the recognition of the certificates of competence of the Master Alexander Galyanov, Doc SCA 1 to 13 for Vasiliy Ogarkov, Doc SCB1 to 12 for Sergey Rudich the Third Officer, Doc SCC1 to 14 for Aleksey Rudenko Third Officer, Doc SCD1 to 11 for Vladimir Mikulchik Chief Engineer and Doc SCE1 to 10 of Igor Baran Second Officer.

Dr. Fenech exhibited a note in the records of the proceedings in which was stated that Vasiliy Ogarkov no longer worked with the company.

Christophe Dreano at pg 3098 confirmed that he formed part of the diving team on the wreck of the Klein Familie in the search and recovery of the bodies of the missing crew and that no bodies were found around the wreck of the Klein Familie. He confirmed the evidence given in piece 70 of the French Proces Verbal. He confirmed that his fellow divers were taking the video footage of the wreck.

Maitre Julien Laine at pg3104 confirmed that there were two teams of two divers each, that he was part of the second team and took the video of the wreck. He also confirmed the absence of the bodies. He confirmed the evidence contained in piece 69.

Cadic Fabrice at pg 3112 et seq Operations Chief duty officer at Cross Jobourg, confirmed that at 7.48 Universal Time (UT) he received a call on Channel 13 that the ship Alblas has sighted two red flares. The vessel Steins informed the station of the same fact. At 07.50 he sent out a security PAN Message in English and French regarding the red flares. At 07.54 Alblas signalled the sighting of a drifting raft and rescue operations were initiated by this vessel.

Cadic stated that he spoke to the survivor who told him that the collision ensued about half an hour before sunrise and that they were a crew of five and that he saw a member of crew afloat. Rescue operation to search for a man at sea were put in operation (pg 3114) including air cover by helicopter Dragon 50 and Falcon 50. He confirmed that the Sichem Pandora notified its entry in the Traffic Separation Scheme.

Cadic at pg 3117/8 confirmed that Gueno had been awakened by an impact and saw a ship which had a blue hull.

Cadic stated that vessels in excess of 300 tons had to inform the Cross Jobourg of their presence. Fishing vessels did not necessarily do so. He could not inform the Court whether the Klein Familie had reported its presence in the TSS to Cross. (vide pg3120)

Cadic exhibited Doc SMC, chronology of events and VHF communication of the 5<sup>th</sup> of January, 2006 of Cross.

Christophe Dreano at pg 3126 confirmed that his co diver was Olivier Seguin.

Captain Milet Stephane confirmed the contents of piece 44, the paint analysis report and declared that he was assisted by Richard Gosse and Franck Partouche. (vide pg3131) his testimony, together with that of Richard Gosse and Franck Partouche is examined in the section of this formal inquiry under **Expert Reports of Paint Analysis section IA .**

Charles Averty at pg3161 First Officer of the Maritime Affairs Technical and Administrative Corps confirmed the statement made in the French Proces Verbal ie the report of the vessel's Alblas and the Steins on the sighting of flares, the rescue operation or Jean-Michel Gueno, the sinking of the Klein Familie. Charles Averty confirmed that Fabrice Cadic was on duty with him.

Dr. Donatella Frendo Dimech from the office of the Attorney General of Malta exhibited Doc AG5 to AG9 being the second letter of request. Doc AG7 the radar trajectories of the 5<sup>th</sup> of January, 2006 from Cross Jobourg at 06.52 hrs, 07.19 hrs . 43 seconds, and 07.47 hrs . 29 seconds.

On the 28 of September, 2006 at Cross station Jobourg, Herves Guesguen at pg 3171 et seq gave a broad outline of the operational facility of Cross Jobourg

and the principal duties of Traffic Monitoring and that of Search and Rescue. He confirmed that there were other subsidiary duties concerning fishery protection and marine pollution surveillance.

He said that there were always two persons on watch in these two divisions. One of the two persons on duty in the Marine Rescue Coordination centre (MRCC) was Charles Averty. Participating in the rescue operations were two officers, two watch officers and two deputies. He explained that Cross Jobourg received information via two antennae with two processing units which acted as backup for each other.

Although Cross was equipped with the new automatic information system (AIS) on the 5<sup>th</sup> of January, 2006 they only had the radar system and the identification of vessels that was made through VHF radio.

Herves Guesguen stated that vessels in excess of 300 tons were obliged to identify themselves on entering the TSS and obliged to identify the name of the vessels by VHF. The vessels were then tagged according to type; for example orange tags for vessels carrying dangerous cargo: green tags for vessels that did not had dangerous cargo, yellow tags for vessels requiring special attention. Ex. Towing vessels. Vessels with a grey tag were vessels which had not identified themselves.

Guesguen stated that when the Sichem Pandora entered the TSS it was given the number 199 at pg3186. The system recorded the position of each vessel every 12 minutes (Vide pg3189). The recorded trajectory for the Sichem Pandora was retrieved at 06.50 hrs and indicated the following vessels and their tag numbers:

Belarus – 146  
Helas Warrior – 206  
Sea Shark – 214  
Marie Schule – 177  
Viper – 167  
Turbo – 170  
SD Loire – 210  
Emshorm – 166  
Ziema Zamojska – 180  
Olga – 196  
Little Jane – 86  
Algo – 179



Maitre Malo on oath testified that the distance is measured in nautical miles. There was a time differential of 2 minutes (vide pg3198). On the 5<sup>th</sup> of January, 2006 there was no discrepancy in time (vide pg3199) and time was GMT (vide pg3200).

The wreck of the Klein Familie was marked no 2, vessel Emstorm was marked 166 passed North 0.23 nautical miles from wreck.

Balarius was marked 146 passed South at a distance of 8 nautical miles.

Turbo was marked 170 passed North of the wreck at 06.44 hrs and 40 seconds.

Viper was marked 167 passed North of the wreck at 06.45 at a distance of 1.4 nautical miles.

The Helas Warrior passed North of the wreck at a distance of 0.74 at 06.50 hrs and 30 seconds.

MSC Lea passed South of the wreck at a distance of 0.3 nautical miles at 06.52 hrs.

At pg 3208 on a question posed by the assessor's of this Court, Guesguen affirmed that "there is a little error between the positions given by GPS and the position that we can see on the radar". This discrepancy is approximately 200 metres between what is indicated on the South Cross and what is perceived on radar.

Guesguen exhibited Doc HGCI a letter of the 19th of September, Doc HGCI1 a copy of the trajectory at 06.50 GMT on the 5<sup>th</sup> of January, 2006.

The Sea Shark was marked 214 passed the wreck North at 1.18 nautical miles, at 07.03 hrs and 25 seconds.

The SD Loir was marked 210 passed 1.39 nautical miles North at 07.05 hrs and 56 seconds.

The vessel marked as 177 was the Marie Schule which passed the wreck at a distance of 0.57 nautical miles North at 07.21 hrs and 6 seconds.

Vessel ID Contender marked as 205 passed the wreck at a distance of 0.20 nautical miles North of the wreck at 07.29 hrs and 15 seconds.

The vessels The Moro, Little Jane, Algol (No 96, 86, 139) passed the site of the wreck between 4 to 4½ hrs before.

Algol marked as 139 at 03.13 GMT was 1.18 miles South of wreck and Olga marked as 96 passed the wreck at 0.91 nautical miles at 03.39 hrs and 30 seconds.

Little Jane marked as 86 passed South of the wreck at 01.53 hrs.

The Atlas marked as 229 was the third vessel to identify the flares.

Asked what led Cross Jobourg to conclude that it was the Sichem Pandora that it was involved in the sinking of the Klein Familie, Guesguen stated:

“we first established a list of vessels that were in the vicinity of the presumed spot of the incident and this was based on the obligatory report of the vessels in accordance with the Traffic 2000 System. We went back in time based on the time of recovery of the vessel of the person as well as on the actual declarations of this person who stated that the incident occurred some 30 minutes before. From this list, we looked at a list of 12, I believe they are 12 vessels that are in this list and we looked at the trajectories of these vessels. And the attention of the watch officer was brought towards the action that was not comprehensive of the Sichem Pandora. (Vide pg3217).

He said that Port State control inspections were carried out on these 12 vessels.

He exhibited DocHGJ2 the trajectory position at 07.47 hrs and 29seconds, Doc HGJ3 the trajectory position at 6.52 hrs and Doc HGJ4 the trajectory position at 07.19 hrs and 43 seconds.

Doc HGJ5 is a CD of the audio transmission of Cross.

Inquiry officer Alfred Cremona at pg3257 exhibited the port state control inspections of the vessels indicated by Herves Guesguen being the ones identified within the relevant period vide pg3217.

These port state inspections were conducted by Paris MOU and are the following:

Doc WAC1 Paris MOU report on Sea Shark vide pg3261

Doc WAC2 Paris MOU report on Hellas Warrior vide pg3265

Doc WAC3 Paris MOU report on Belarius vide pg3267

Doc WAC4 Paris MOU report on MSC Lea vide pg3272

Doc WAC5 Paris MOU report on Torpo vide pg3278

Doc WAC6 Paris MOU report on Pioner Belarussie vide pg3284

Doc WAC7 Paris MOU report on Marie Schule vide pg3287

Doc WAC8 Paris MOU report on Viper vide pg3290

Doc WAC9 Paris MOU report on ID Contender vide pg3294

The report of the inspectors show that no deficiencies on these vessels were noted. With the exception of the vessels the Viper and the Marie Schule, none of these reports mention a visual inspection of the hull of the vessels. (vide pg 3283 and 3289). With regards to the Viper and the Marie Schule, after a visual inspection of their hulls was carried out, no visual damage was noted.

The reports above mentioned were consigned to the inquiring officer by Captian Bernard Zammit of the Malta Maritime Authority, who confirmed these reports at pg3301.

Deputy Registrar of the Maltese Courts of Justice Ms Maria Dolores Fenech exhibited 7 wooden crates containing various pieces of the wreckage of the Klein Familie. (Marked and exhibited W1 to 7 vide pg 3505), which were transmitted to the Maltese Judicial Authority from France.

David Scicluna exhibits officer exhibited the relevant shipping documents accompanying the crates W1 to W7. These were marked as Doc DS and DS1. The exhibited photographs of the crates marked as Doc DS2 to DS11. The seal of the container transporting the crates W1 to W7 was marked as Doc DS12.

The affidavit of Guillaume Brajeux was marked Doc HFW. Advocate representing the owners of the Sichem Pandora confirmed that civil proceedings were instituted by the families of the victims of the crew of the Sichem Pandora in the French Courts. Charles Evrard, maritime expert was appointed by the President of that Court to draw up a survey report and to advice the same Court on technical matters. This report is still pending. He reiterated that nothing in the evidence before the French Civil proceedings as

well as the investigations carried out by the Gendarmerie Maritime conclusively demonstrated a collision between the Sichem Pandora and the Klein Familie. The case was largely based on circumstantial evidence. He said that the Klein Familie being a wooden vessel was not detected by the radar at Cross Jobourg so that Cross could not plot her course.

The presumed time of the sinking of the Klein Familie was only based on the statements of the survivor Jean-Michele Gueno. There were conflicting results from the paint analysis of the two vessels.

Mr. Brajeux referred to the initial statement of Gueno where in he indicated a blue ship with yellow tubes. He said that although the Sichem Pandora was diverted to Dunkirk by the French Maritime Authorities several vessels passed in the vicinity of the wreck around the alleged time of the sinking and were only inspected in accordance with the Paris MOU or not at all.

The statements given by the members of the crew of the Sichem Pandora to Charles Evrard, confirmed that the crew was keeping a proper and visual radar look-out and did not see or feel any impact or collision with a fishing boat.

He exhibited the BEAmer report and highlighted its conclusions. He made reference to the testimony of Mika (vide pg3876), Foster, Letellier and Colombel. He stated that the radio distress signal it was to be installed by the 1<sup>st</sup> of January, 2006 remained outstanding and the list of the crew of the trawler was not up to date.

At pg4039 Guillaume Brajeux gave evidence before this Court and confirmed Doc HFW, his affidavit and exhibits on oath.

He confirmed that the crew of the Sichem Pandora at all times reaffirmed the same position.

With reference to the BEAmer report, he reiterated that the report was intended only for safety purposes and to avoid incidents at sea. He reiterated that no conclusive evidence was brought before the French Civil Proceedings of a collision between the Sichem Pandora and the Klein Familie. He highlighted some of the conclusions of the same BEAmer report and exhibited Doc 2A Navigation Certificate of the Klein Familie (vide pg4072), Doc 3A the annual survey of the Klein Familie (Vide pg4074), Doc 4A Load line certificate of the Klein Familie (vide pg 4078), Doc 5A Seaman Record Book of Thierry

Goueslain (vide pg 4080), and Doc 6A that of Ludovic Jacques Herauville (vide pg4082), Doc 7A statements of Martine and Henry Mika pg4084; of Marie-Line Foster at pg 4086; of Alain Letellier (vide pg4088 and 4089) and that of Colombel Chantal at pg 4091; Doc 8A inspection report of the vessel Radio's station vide pg 4093; Doc 9A a copy of exhibit no 9 (vide pg4097).

The conclusions reached by Guillaume Brajeux thereafter constitute hear say evidence or opinion and are treated as such by this Court.

The statement of Henry and Martine Mika is to the effect that Thierry Goueslain was in a poor state of health with cardio vascular and respiratory problems for which he was hospitalized at the end of 2004.

Marie-Line Foster confirmed the bad state of health of Goueslain, his weight problems, breathing difficulties; sleep apnoea and hearth problems. (vide pg4086).

Letellier Alain confirmed the health problems of Thierry Goueslain, that he was hospitalized at the end of 2004, that he weighted 160 kg, had difficulties breathing and suffered from sleep apnoea. He would often fall asleep before dinner and while in company (vide pg4089).

His evidence was attested before Notary Christian Jacques vide Doc AFM1 at pg4230.

Chantal Colombel confirmed that her husband had sailed with Thierry Goueslain for several years and was aware of his health problems which included a hearth condition and pulmonary problems. Her husband had told her that Goueslain would often fall asleep at the helm and that this constituted a very grave risk to everybody on board.

Her evidence was attested before Notary Christian Jacques vide Doc AFM2 at pg4233.

Clause Thornberg in his affidavit Doc KT at pg4256 et seq was Chief executive officer of Tesma, a ship management company owned by the Norwegian Eitzen Group of Companies at the time of the tragic incident of the sinking of the Klein Familie on the 5<sup>th</sup> of January, 2006. Tesma was one of the largest ship management companies of the world. The Sichem Pandora was under full

management with Tesma Singapore which had a high rating with large oil companies.

The Sichem Pandora was built in Korea in 1994, a 9,215 dwt, large chemical tanker – 116.7 metres in length with a beam of 19.0 metres. She had 14 cargo tanks all inside a double hull. With a crew of 16 mainly Russian and Ukrainians, the Sichem Pandora was registered in Malta and classed by Det Norske Veritas and equipped with a full set of up to day navigational equipment and a navigational bridge that offered a clear look-out.

Her crew was qualified and experienced and vetted not only by international authorities but by oil majors who scheduled regular inspections.

Clause Thornberg detailed the events of the 5<sup>th</sup> of January, 2006, the French port state inspection which the Sichem Pandora passed without remarks: the underwater inspection of her hull. Thornberg stated that he personally travelled to France on the 7<sup>th</sup> of January, 2006 and interviewed the master and chief officer who explained the sequent of events, the manoeuvre before 08.00 hrs to give way to a fishing buoy and his impression that the crew had nothing to hide.

Thornberg stated that should the analysis of the paint samples result to be similar to those of the Sichem Pandora then it was likely that the vessel only had contact with the wreck of the Sichem Pandora. He gave a brief outline of the hearing and legal proceedings that ensued. He said that as Captain he had navigated the English channel on numerous occasions. He confirmed that it was a busy water way which dictated a high level of alertness in the navigator due to the extensive fishing activities carried out by relatively small wooden vessels that could not be picked up on radar.

Thornberg stated that there was no definitive proof that the Sichem Pandora had collided with the Klein Familie and the Sichem Pandora was one of several vessels in the vicinity.

In spite of this, this vessel was the only one subjected to an underwater inspection of its hull. He believed his crew would have given assistance to seaman in distress and dismissed the idea of a conspiracy of its crew.

In cross-examination, before this Court and its assessor's (vide pg4274) Thornberg gave a detailed outline of his work and expertise. He confirmed

that he was never called to investigate a marine collision and was not a psychologist. He confirmed the affidavit Doc KT.

He said that on his first night in France he interviewed the officers and navigators on the bridge, the Chief engineer, the two look-outs and the cook. Asked whether in effecting the sharp manoeuvre, the noise of the engine and the vibrations of the vessel might muffle any noise generated by an impact, Thornberg stated that they had conducted an experiment by reconstructing the same manoeuvre. The crew did not feel any vibrations or hear any noise.

Thornberg stated that the contents of his statement on Thierry's health constituted evidence in the French Civil Proceedings. Thornberg state that the simulation of the manoeuvre took place in the same weather conditions to a similar depth of water. The manoeuvre only generated minor vibrations and a minor list. Thornberg undertook to provide the stability characteristics of the Sichem Pandora. Thornberg said that oil majors vetted vessels in order to limit the risk and this was over and above the regular Flag State and Port State Control Inspections.

Thornberg outlined the main difficulties of navigation in the English Channel with small fishing vessels travelling against the direction of traffic in the TSS in breach of International Regulations whilst escaping detection on radar.

Thornberg confirmed the image of the Klein Familie attached to his affidavit where the radar reflector shown was very small. Thornberg said that the statement he made relating to his crew was based on his experience with people of various nationalities.

Thornberg agreed that the change of watch was a critical time.

Thornberg stated that only one person would be obliged to fill in the ship's log and documentation prior to the change of watch whilst the second person would be on the look-out.

Thornberg said that the designated person from the management would be within the Singapore organisation. Thornberg did not know whether there was a near-miss report submitted by the Master of the Sichem Pandora to Tesma.

A copy of the stability booklet of the Sichem Pandora was exhibited as Doc SP1 together with Doc SP2 the result of the simulated zig-zag manoeuvre. The results showed that there were slight vibrations in the engine room and accommodation ("such as might have passed unnoticed") and a slight drop in RPM while rate of turn was gradually increased. There was no heel observed while turning (vide pg4323).

The letter of request for the cross-examination of the French witnesses Chantal Colombel and Alain Letellier was duly expedited at pg 4600.

In cross-examination Alain Letellier stated that he was on very good terms with Thierry Goueslain's family who lived a 100 metres from his residence. They were practically neighbours. He visited them frequently as there was an established long friendship with both Thierry and his father Daniel whom he visited regularly. He said that he knew the family since 1982/3. He said that Jean Marie Goueslain had introduced him to the family. He considered himself a good friend to both father and son and that the demise of Thierry Goueslain did not alter the relationship he had with his father Daniel. Alain Letellier stated that it was Daniel Goueslain who asked him to make known the illness of his son. He declared that he wrote the testimony on his own and that they went together to have it attested before a notary.

He said that it was Daniel Goueslain who asked him to give his testimony in the proceedings. He confirmed that he had on four or five occasions in the past, sailed with Thierry Goueslain in the proximity of Cherbourg but that he never sailed with Thierry's father. (vide pg4656).


Chantal Colombel in cross-examination stated that she never sailed with or went on board the Klein Familie whilst her husband was alive. She had no personal knowledge of the facts on which she testified. These were only the words that her husband used to say.

She confirmed that she had no medical training. She confirmed that none of the owners of the Sichem Pandora approached her in any way and no one subpoenaed her to appear in the proceedings. It was Daniel Goueslain that asked her to give her testimony.

She said that she was on good terms with Daniel Goueslain and his wife Ginette. She did not have any contact with Thierry's wife. (vide pg4639).

PC1525 Patrick Farrugia, Scene of the Crime Officer exhibited a dossier containing 148 coloured photographs marked as Doc PF.

Doc AG10 and AG11 were exhibited by the office of the Attorney General.  
(vide pg3413 to 3415).



## I. The Expert Reports on Paint Analysis:

### A . The French Report

Criminal Research Institute issued the results of the analysis of the samples of the paint from the wreck of the Klein Familie and the paint samples elevated from the hull of the Sichem Pandora, which analysis was exhibited as piece 44 and was carried out by experts Miller Stephan, Richard Gosse and Franck Parteuche. They concluded that:

{For easy reference the samples of paint or prelevement indicated as 7 to 16 are the following:

7-9 are samples from the Sichem Pandora  
10-16 are samples from the Klein Familie}

“The respective contents of items No 7 to 16 – PV no 8/2006 – BRGM CHERBOURG have been used for observation and/or analysis purposes.

In connection with the first two missions dated 6 January, 2006, marks of transfer of the green, yellow, orange, and double-coated paint fragments (green, orange), types of friction marks – respectively green friction marks – were perceived on paint fragments of item No 9 – respectively of item no 8.

The organic and elementary qualitative comparative analysis have revealed:

- as regards the green marks of friction (items no 8 and 9) that they could not be differentiated from the coating of green paint of the paint fragments, as per item no 12
- as regards the orange marks of friction (item no 9) that they could not be differentiated from the coating of orange paint 1 of the paint fragments, as per item no 14.
- As regards the very light green marks of friction (item no 9) that they could not be differentiated from the very light green coating of paint of the paint fragments, as per item no 14.
- As regards the double-coated fragments (Very light green, orange, item no 9) that they could not be differentiated, in terms of succession of

colours of coatings and substances, from a succession of two coatings of the paint system applied to the fragments, as per item no 14.

Appendix 4 – sheets 1  
and 2

**These elements lead us to conclude that the aforementioned marks of transfer; taken from the vessel “Sichem Pandora”, originate from the paint system of the vessel “Klein Familie”, from where items no 12 and 14 have been taken, or any other vessel coated with an identical paint system.**

In connection with the third mission dated 7 January 2006, marks of transfer of they type of pink marks of friction were perceived on the sample, as per item no 16.

It was possible to establish that these pink friction marks have a qualitative organic and elementary composition which cannot be differentiated from a mixture of the successive red and white coatings of the paint system corresponding to the fragments, as per item no 9.

Appendix 4 – sheet 3

**This leads us to conclude that these marks of transfer found in a sample from the debris of the vessel “Klein Familie” may originate from part of the paint system of the vessel “Sichem Pandora”, from which item no 9 was taken or from any other vessel coated with an identical paint system.**

**From all the aforementioned elements, we are led to conclude it is possible and plausible that there has been a cross-transfer of substances between the vessels “Klein Familie” and “Sichem Pandora”.**

The French analyst Captain Milet Stephane confirmed the contents of piece 44, the paint analysis report and declared that he was assisted by Richard Gosse and Franck Partouche. (vide pg3131).

He said that as paint analysts, they used the techniques of Infrared Microscopy technique, the Raman Microscopy and Micro Fluorescence - X in the tests they executed.

Stephane stated that the aim of the analysis was not the identification of the paint but the identification of material transfer and to compare the elements on the seized exhibits.

He said that on opening an exhibit, one carries out a visual observation of the same, to look for common elements and the analytical strategies are conducted on these common elements.

Stephane stated that paint analysis for vessels was not commonly executed at their laboratory and that this case was the only one analysed from January, 2006. He reiterated that his task was not to identify anti-fouling paint products which were on the market but only to seek marks for comparison. Paints were polymers with a generic form similar to those used on cars, boats or houses.

He said that there were families of resins – “the specificities will concern the resin itself ie the pigments and other elements”. (vide pg3137). Stephan stated that they conducted three analytical techniques which give different information ie organic information by the infrared technique; information about the pigmentation on the Raman Microscopy ; mineral information by the Micro-Florescence – X technique.

The three kind of tests gave three kinds of different properties of the paint.

Stephane stated that he was a graduate in chemistry and engineering. At pg3138, Stephane could not give a percentage reliability regarding the tests or the equipment used. He stated that the infrared apparatus was checked every week.

Charles Gastry at pg3139 et seq confirmed the paint analysis report piece 44 of the French Proces Verbal and the conclusions reached there in.

He stated that he had a Master’s degree in Forensic Chemistry and that he had executed around 50 paint analysis prior to the case in examination. Only one case – the Braise case – however concerned Marine paints (vide pg3140).

Charles Gastry stated that he did not conduct an examination into the type of anti-fouling paint. He said that the Department had conducted a study on vehicle paints but not on marine paints.

The tests performed were intended to discover whether any paint marks found on the Sichem Pandora were from the paints of the Klein Familie. Confirming that the analysis did not lead "to certainty" that the paint was of a particular ship, Gastry stated;

"conclusions have been drawn but we can in no way affirm that the markings found on the Sichem Pandora are beyond doubt those of the Klein Familie. However all findings, coupled with our experience led us to say that the sampling on the Sichem Pandora I.E. the three layers of paint which are chemically identical to the three layers of paint on the Klein Familie, show – and this is an important discriminatory element – that there had been contact between the two ships. However we cannot ascertain that the three layers – green, very light green and orange, mentioned in the report – cannot be found on a vessel other than the Klein Familie" (Vide pg3143).

At pg 3145 he draws a comparison between the analysis effected on vehicle paint of suspect cars. He said that in relation to cars which are mass produced, the analysis was more plausible. However vessels were "not mass produced which makes the possibility of identification more affirmative". (vide pg3146).

Franck Partouche at pg3147 et seq confirmed the report piece 44 and his participation in the technical analysis conducted. He affirmed that he did not take part in the interpretation or the conclusions drawn in the report piece 44, but that he actually carried out some of the scientific tests. He confirmed that there is no particular data at his disposal enabling the establishment of the origin of the paint. (vide pg3151).

Richard Gosse at pg3155 et seq explained the analysis of paint resin by Raman Spectroscopy which gives the generic state of the resin in paints. This test confirms the existence or otherwise of similar absorption bands from which a comparative analysis may be conducted. Resin identification is not undertaken.

As regards the examination of the elements present in the composition of paint, Gosse expounded on the manner in which the test was conducted ie by bombarding the sample with X Rays exciting the matter, thereby eliciting the elements in the paint such as sodium, potassium, titanium, iron etc.

Richard Gosse stated that after conducting the three analysis on the paint samples, the marks found on the samples taken from the Sichem Pandora could not be differentiated from those of the Klein Familie.

## B. Maltese Report

At pg3320 the Court consigned Expert Mario Mifsud Prelevment 8, 9, 10, 11, 12, and 13 for his analysis.

Pharmacist Mario Mifsud at pg3328 exhibited Doc MM, the first part of the paint analysis undertaken where in he concluded that:

“no elemental similarity, in pattern and concentration was observed between the paint samples allegedly taken from the Sichem Pandora and the Klein Familie” (vide pg 3345).

Mario Mifsud explained the methods used in the paint analysis undertaken. He said that following a visual observation of the paint samples, the analyst identified an area of paint that seemed similar.

“It is this that is analysed by means of the Scanning Electron Microscope with Energy Dispersive X-Ray spectrometer”. (vide pg3345).

The apparatus enlarges the area of the sample chosen by the analyst which is then bombarded by electrons which give a specific spectra.

The two paint samples may be said to be similar if they have a **similarity in the pattern as well as similarity in the concentration of the elements that make up the paint**. In the case of Marine Paint there is an added difficulty because the sea water itself contains elements which may be absorbed by the Marine Paint. (vide table at pg3345 of the known elements present in ocean water). Several elements in sea water are also elements ordinarily found in Marine Paints, such as Sulphur, Potassium, Magnesium, and Calcium.

Pharmacist Mifsud stated that there is an international database regarding vehicle paints and sprays. **This however is not true of Marine Paints. Therefore even if a similarity is established between two Marine Paints, there is no means of quantifying the percentage probability of a match.**

In the analysis under examination, the patterns of the spectra had no similarity to each other. The samples furthermore did not have a similar concentration

of constituent elements. (vide graph at pg 3352 of the Sichem Pandora and the graph of the Klein Familie at pg 3384 regarding the comparison of the light green paint.

Pharmacist Mario Mifsud and Inspector Mario Ellul exhibited Doc MMM containing the second part of the paint analysis on the samples received by this Court. The analysis were conducted by means of Raman Spectroscopy and focus on the resinous part of the paint samples. (vide pg3390 et seq).

In this analysis there was a similarity of the paint samples as revealed from the spectra given by this technique. In there report Doc MMM, Mifsud and Ellul conclude that they could not exclude contact between the Sichem Pandora and the Klein Familie.

With regards to the conclusions reached on the elemental components of the paints, Pharmacist Mario Mifsud said that the analysis had been carried out one year later and that there could have been the effect of corrosion on the paint samples that could have effected the metallic elements of the samples analysed (vide pg3401).

Pharmacist Mario Mifsud and Inspector Ellul also exhibited Doc MX, a paint analysis report of a green paint sample taken randomly from the door of the Police General Headquarters of Malta. This green paint sample (Doc MX1) was then examined with the samples of the Klein Familie and the Sichem Pandora, and found to be similar. (vide pg3428 et seq).

At pg3445 Mario Mifsud and Inspector Ellul testified that they could not reach a conclusion that there was contact between the Sichem Pandora and the Klein Familie **but they could not exclude it.**

Pharmacist Mario Mifsud and Inspector Ellul exhibited an addendum to Doc MX which is marked as Appendix MMM (vide pg3442).

Mario Mifsud stated that the same tests carried out on the samples of paint elevated from the Sichem Pandora and the Klein Familie were carried out on the paint sample elevated from the door of the Police General Headquarters.

The analysis of the resinous part of the paint was such that one could not differentiate the three paints. Pharmacist Mario Mifsud and Inspector Ellul concluded;

**“therefore the tests did not provide a sufficient discriminating analysis”.**  
**(vide pg 3447 and 3448).**

After detailed examination of international laboratories (vide pg3400 to 3545), the Court appointed Forensic Expert Peter Moore of Minton Treharne and Davies Limited Cardiff to carry out the scientific examinations and analysis of the paint samples as indicated in the decree of this Court of the 18<sup>th</sup> of April, 2008 (vide pg3555).

The paint samples were entrusted to Mario Mifsud who personally travelled to Cardiff to consign the said samples to the above mentioned laboratories (vide pg3557/8).

### **C. The Minton Treharne and Davies Report by Peter Moore**

Peter John Moore at pg 3596 on oath exhibited and confirmed Doc PM, his report on the paint analysis of the samples consigned to him ie those indicated at pg3555.

He gave a detailed account of his qualifications and expertise and said that he had been asked to give a comparative analysis on approximately 40 to 50 cases concerning Marine Paints. (vide pg3598).

{For easy reference:

1-3 are samples from the Sichem Pandora  
4-10 are samples from the Klein Familie}

Peter Moore concluded at pg3794 that:

#### **Klein Familie**

11.1 In my opinion, on the basis of the FTIR spectra and EDX analysis the smear marks on samples 9 and 10 from the Klein Familie are similar to the white and red layers from samples 2 and 3 from the Sichem Pandora. In



addition the smear marks have a primarily pint colouration which appears to be a combination of white and light red particles.

11.2 It is probable that, if these marks on the Klein Familie were caused by the vessel impacting an object, then that object had the same red and white paint coating system as that present on the Sichem Pandora.

### **Sichem Pandora**

11.3 The material on the surface of samples 2 and 3 from the Sichem Pandora appears to be a thin re deposited layer of paint containing metallic fragments and various residual colours.

11.4 FTIR and EDX analysis shows that this layer is chemically similar to the red and white layers of samples 2 and 3 and the smears on samples 9 and 10.

11.5 The evidence suggests that this re deposited top layer on samples 2 and 3 contains mostly material from the lower layers scraped off from an adjacent part of the hull, including steel fragments from either the Sichem Pandora or the object she impacted.

11.6 Whilst the colour of this layer does not match the red and white layers it appears that the other paint residues present have altered the original colour of this material.

11.7 When examined microscopically the paint residue on samples 2 and 3 appear to show light green, dark green and orange particles visually similar to the three colours of paints found in sample 8 from the Klein Familie, the small flecks of light green paint also show EDX similarities to this paint.

11.8 In addition to this the small flecks of light green paint show a high degree of similarity paint on sample 8 from the Klein Familie when subjected to FTIR analysis.

11.9 On the basis of this evidence it is probable that the Sichem Pandora has impacted an object coated with similar paints to those on sample 8 of the Klein Familie, and in particular the same type of light green paint.

### **Overall Conclusions**

11.10 In my opinion the re deposited paint on samples 2 and 3 from the Sichem Pandora is similar in composition to the smeared paint from samples 9 and 10 from the Klein Familie.

11.11 In particular the light green paint flakes present in the re deposited material in samples 2 and 3 exhibit a high degree of FTIR and visual similarity to sample 8 from the Klein Familie.

11.12 The paint smears on the Klein Familie are similar in composition to the paint on the Sichem Pandora.

11.13 On the basis of the available evidence I would conclude that the similarities between the areas of material transfer is consistent with transfer of material following a collision.” (vide pg 3794 to 3795).

He said that ideally the samples should have been a square centimetre in size (vide pg3600) and that some of the samples given were very small. He explained the methods or techniques used ie analysis by FTIR (Fourier Transform Infra Red Analysis) and EDX (Energy Dispersive X-Ray Analysis).

He said that he tried to concentrate on analyzing areas of the samples where paint had been smeared or re deposited on another layer of paint. He confirmed that in order to effect a correct analysis, the tests have to be carried out from multiple sites of the sample. These multiple sites ranged from 4 or 5 for very small samples and between 20 and 25 on the larger paint samples.

Peter Moore stated that it was not possible to give a quantitative percentage value on the probability of the conclusions he arrived at. Peter Moore stated that the paint transfers or re deposited material was two-way. (vide pg3620).

He said that although their laboratory had a paint database, they did not have a dedicated marine paint database.

At pg3624 Peter Moore could not determine the percentage of false positives in his analytical work. Asked how in absence of the quantum of false positives he could reach a percentage of probability in his conclusions, Peter Moore confirmed that there was the strongest evidence of similarity between sample 3 and 8:

“a very high level of probability” (vide pg3625).

Peter Moore declared that a paint sample that is not properly stored could undergo chemical changes such as corrosion of the metallic elements. The quality of the samples given however did not show such deterioration (Vide pg3635).

He opined that the gray dark layer was typically a steel primer on the Sichem Pandora and that the orange paint on the Klein Familie was typically a wood primer.

At pg3638 Peter Moore corrected pg 7 of his report in that items 1, 2 and 3 should be correlated to the Sichem Pandora whilst items 4 and 10 should read the Klein Familie.

Peter Moore in cross examination affirmed that his field of expertise was in metallurgy and that up to the year 1999, Marine paints were not his main area of expertise. (vide pg3646).

He said, with reference to the presence of phosphorus in the red paint in item 9 and the absence of phosphorus in the pink smears, that this was not a significant difference since phosphorus was a common element in a list of materials. (Vide pg3660).

Asked how he could sustain his conclusions of similarity of the paint samples between sample 9 and 10 when the elements of potassium, calcium, chromium, titanium and barium were present in substantially different concentrations or not present at all as with barium and chromium, (likewise for the elements of magnesium and silicone). Peter Moore stated that "there is not necessarily a notable difference to make me immediately say these cannot be from the same source, but likewise, the magnesium and silicone would make me want to go and do further analysis". (vide pg3663).

Asked whether the FTIR technique was adequate for the purposes of distinguishing two paints in view of the experiment conducted in the report Doc MX, Peter Moore stated that he could see the difference in the spectra on Doc MX and cited pg 3679. However in view of the similarities:

"it means that small differences have to be considered probably far more when comparing gloss to gloss paints, then when say comparing gloss to an ipoxy". (Ibid 3679).

Peter Moore sustained his opinion on the similarity between samples 2 and 3 and sample 9 and 10 in spite of the absence of copper in samples 9 and 10. He opined that the gray primer contained 46% copper and that it was probable that the copper leached into the adjacent white paint. (Vide pg3687).

Asked to explain the difference in intensity and saturation of the element titanium in sample 2, Peter Moore explained that in the event of an impact,

material from both ships, is scrapped off and mixed together and this is where the titanium would have come from.

Referred to the pink scrapings in samples 9 and 10 which contain a trace of sulphur, and absence of sulphate in the red sample marked 2, Peter Moore stated that this trace element may have been associated with sea water. (vide pg3692).

As regards to the top layer of sample 2 ie the intermittent layer containing metal shards, it was possible that these were caused by the friction of the anchor or anchor chains. Peter Moore corrected the error in the numeration of the table of 9.19 (ie 3 becomes 2 and 2 becomes 3).

As regards the comparison between sample 2 and 8 (vide pg3720) the green scrapings in sample 2 contained 7% copper where as there was an absence of copper in sample 8, Peter Moore stated that the copper, as well as the barium was coming from somewhere else. (vide pg3270/1). There was however a very strong similarity in the analysis of these samples by FTIR. The trace of phosphorous contained in sample 8 was very minimal. These differences or these similarities did not lead him to conclude that the samples were not in fact similar. Peter Moore stated that sample 3 and sample 8 were not a perfect match. Sample 3 was the amalgamation of components. Peter Moore concluded that as regards paint sample 3, the green pink flakes in sample 3 were exceedingly similar to the paint on sample 8 and gave a 99% similarity. (vide pg3725).

The EDX analysis of sample 3 was not included in the report Doc PM.

Peter Moore confirmed that his laboratory and apparti therein contained are accredited by UCAS, formerly known as the National Association of Measurement and Accreditation who inspected the premises every year and check the calibration of the apparatus.

At pg3733, Peter Moore stated that copper sulphate is not normally green in coloration and the copper is often associated with the compounds that have a good bonding ability with steel.

Peter John Moore at pg 3740 exhibited appendix 3 ie the EDX results of sample 3. (vide pg3768 to 3773).

Asked about the occurrence of silicon and magnesium in marine paint, Peter Moore said that these elements were often present in the filler materials of paint ie as a bulking agent. Peter Moore stated that he did not identify the antifouling compounds of the paint (vide pg3755).

He did not give the purpose of each of the layers of paint analysed and this was not the scope of his report. With reference to the analysis of sample 1 (French sample 7), the antifouling paint, Peter Moore stated that he did not expect to find the presence of iron in antifouling paint. Zinc may be present in antifouling paints. The presence of iron and zinc could be part of the re depositing process.

After having exhibited Appendix 3, Peter Moore still confirmed the conclusions contained in Doc PM.

#### D. The Trevor Jones Report

At pg3866 Dr. Ann Fenech exhibited Doc AF: the affidavit of Trevor Jones remarked by this Court as Doc TJ where in he concluded:

- 6.1 In my opinion, it is not possible, for the evidence presented in the Report of Institute De Recherche Criminelle De La Gendarmerie National: ***“Recherche De Traces Et Comparaisons De Peintures”*** dated 9<sup>th</sup> Janury, 2006. to infer that the transfer marks taken from the MT “Sichem Pandora” come from the paint system of the “Klein Familie” from which sample 12 and 14 were taken.
- 6.2 Furthermore, in my opinion, it is not possible from the evidence presented in this report, to infer that the transfer marks found on the samples taken from the debris of the “Klein Familie” could come from part of the paint system on the MT “Sichem Pandora” from which sample 9 was taken.
- 6.3 In my opinion, based on the evidence of the Malta National Laboratory Forensic Laboratory Services’s report dated 3<sup>rd</sup> July 2007, there is no similarity, in pattern and concentration of chemical elements between the paint samples allegedly taken from the chemical tanker “Sichem Pandora” and the trawler “Klein Familie”.



- 6.4 There is some similarity between the Raman spectra of green and light green transfer material allegedly taken from "Sichem Pandora" and the spectra of samples of green and light green paint allegedly taken from the trawler "Klein Familie". That is to say that the organic binder of the paint samples contained similar chemical groups, however, in my opinion, this is not proof that the paints are the same, especially when there are differences in the inorganic chemical elements present. This opinion is supported by the Additional Report of the Malta National Laboratory Forensic Laboratory Services's dated 6<sup>th</sup> November, 2007 when they obtained similar Raman spectra from green paint from a door in the Police General Headquarters and from a green paint sample allegedly from "Klein Familie."
- 6.5 In my opinion, the difference between the chemical elements present in the paint samples from "Klein Familie" and "Sichem Pandora" in pattern and concentration is stronger evidence that the two sets of paint samples are different, than the evidence from Raman spectroscopy and Infra-red spectroscopy that the two sets of paint are the same."

Trevor Jones gave a detailed account of his qualifications as a graduate chemist and his expertise as a Senior consultant of the Paint Research Association in Tellington that spends a 32 year period.

Trevor Jones gave a detailed explanation of the analysis that is carried out through the techniques of EDAX and FTIR ie EDAX gave the chemical elements present in the paint whilst FTIR gave the chemical groups present in the paint. He also stated that EDAX gave results that were much more reliable than those of FTIR. (vide pg4112 and 4113). He confirmed his report Doc TJ.

Trevor Jones declared that paint normally contains fillers that often contain similar elements ie aluminium, magnesium and silicone and this is precisely were the analysis by EDAX comes to its own if it identifies an element which is outstanding indeed. Such an outstanding element in fact resulted in the analysis effected by the Maltese laboratory ie technetium (radio active element), vanadium and barium, which elements are very distinctive.

Trevor Jones corrected the numeration of his report vide pg4114.

Trevor Jones stated that with regards to the French report in spite of the fact that the French analysis concluded that the same elements were present in

the paint samples of the Sichem Pandora and the Klein Familie, this does not hold true when one examines the spectra.

Examples of this is paragraph 3.18: (sample 9 of Sichem Pandora is being compared to sample 14 of the Klein Familie), where in spite of the common elements magnesium, aluminium, silicone, sulphur, calcium, titanium and iron, one spectra contains barium and the other spectra has an absence of aluminium. Therefore they are not the same.

Similarly at paragraph 3.25: (sample 9 from the Sichem Pandora is being compared to sample 16 of the Klein Familie), where the common elements cited were magnesium, aluminium, silicone, sulphur, potassium, calcium, titanium and iron, as a matter of fact one spectra does not contain aluminium and sulphur, potassium, titanium, iron. More over no copper and zinc were found in the pink smear which signifies that it was not the red antifouling paint of the Sichem Pandora which is high in copper and zinc.

In the French report para 6, the French analysed concludes that they could not differentiate between the organic and chemical analysis on the green friction marks in samples 8 and 9 and the fragments of green paint from sample 12.

The scientific results do not support this. There is no Raman spectra for sample 8. (only one infra-red spectra for sample 8 which did not match anything – vide annex 1 feuillet 1). While sample 9 and 12 differ in their elemental analysis – vide pg 6 para 3.15 of Doc TJ.

Trevor Jones, referring to the Maltese report of Mario Mifsud indicated that sample 10B of the Klein Familie which contains 59% lead and 35% of barium. None of these elements were found in the paint samples of the Sichem Pandora.

Moreover Technetium, a radio active material, and Vanadium were found on the yellow paint sample 10B of the Klein Familie. These were unique. The yellow and orange paint of the Klein Familie contain Lead and Chromium and none of these elements were found in the paint samples elevated from the Sichem Pandora.

Samples 15 and 16 of the Klein Familie (the red smear) furthermore did not match the red antifouling paint from the Sichem Pandora which anti-fouling paint had the unique elements of a high concentration of copper and zinc. Nor

do the concentration of elements in the red mark 9C compare with those found in sample 15 which contains Potassium which was also unique. Sample 15 and 16 of the Klein Familie contained high levels of Titanium whilst samples 7, 8 and 9 from the Sichem Pandora contain very low levels of titanium.

The similarity between the Raman Spectra perceived in the green and light green samples from the Sichem Pandora when compared to the green and light green paint of the Klein Familie was not proof that the paint is similar. This was proved by Doc MX and the Raman Spectra results on the analysis of the green paint from the Maltese Police General Headquarters door with the green paint of the Klein Familie.

Jones declared that the paint samples on the Klein Familie contained some unique elements such as Lead, Bismuth, Chromium, Vanadium and Technetium, Oxygen whilst the Sichem Pandora also had some unique elements Sulphur, Copper and Zinc. There was no cross transfer of these elements in the areas of samples where material was declared to have been re deposited.

Trevor Jones stated that the analyst should have elevated the samples himself. He confirmed that there is no international data-base of marine paints. He said that it was possible to conduct a FTIR tests on two paints, have a result that shows the same elements when in fact the paints are different. This is what is known as a false positive.

Jones stated that the three different laboratories who carried out analysis in this investigation chose the same three techniques to conduct their analysis. This was due to the small size of the samples.

Jones concluded that the analysis carried out on all the paint samples by the three different laboratories indicated that the paints were different.

### **Deliberates:**

In order to establish the circumstances of event that resulted in the sinking of the Klein Familie and the involvement or otherwise of the vessel Sichem Pandora this Court with its Assessors will analyse the data from both vessels, the data from Cross Jobourg, the approximate time of the collision, the position of the vessels at that established time, the position of other vessels at that established time, the analysis of the paint samples of both vessels and

after examining all the evidence gathered in this inquiry, determine whether responsibility for the sinking of the Klein Familie may be attributed to any person and if so to whom.

#### A. Data of the Sichem Pandora

The SICHEM PANDORA is an oil/chemical tanker registered at Valletta bearing official number 9903. She has the following main particulars:

Call sign	9HKI8
IMO No.	9050412
MMSI No.	256075000
Built	Hyundai (Korea)
Year built	1994
Registered length	110.56m
Breadth	19.00m
Gross tonnage	6544
Net Tonnage	3081
Summer deadweight	9214 tonnes
Depth	10.10m
Summer draft	7.79m
Summer freeboard	2313mm
Power	MAK 6M 552C of 4050kW
Propulsion	CPP
Class	DNV
Class Notation	1A1 Ice Class-1A Tanker for Oil products and Chemicals ESP EO ICS

She was owned by the Eitzen Group of Norway through Aragon Chemicals K.S. of Baerum, Norway, and managed by TESMA Ship Management of Singapore. Records show that at the time of the incident her survey and certification status was in order and up-to-date. She was manned in accordance with the Minimum Safe Manning Certificate issued by the Malta Maritime Authority and all crew qualifications, including tanker endorsements, and medicals were in

order. A watch-keeping system was in place which allowed watchkeepers the required rest periods. Navigation watches were distributed along the traditional of 4hrs-on 8hrs-off system, with the Second Officer doing the 12 to 4, the Chief Officer the 4 to 8, and the Third Officer taking the 8 to 12 watch. No signs of crew fatigue being a contributory factor to the alleged collision were noticed or observed during the investigation. This status was also further confirmed by a Port State inspection carried out immediately after docking at Dunkerque on the 6<sup>th</sup> of January 2006 where no deficiencies were recorded by the boarding PSC Officers (vide Port State Control Inspection Paris MOU of the 6<sup>th</sup> of January 2006 , at pgs. 161 to 163).

## **B. Certification of Sichem Pandora**

Furthermore all the Ship's Certification and all Certificates of the crew of the Sichem Pandora were valid and operative. (vide GA1 to GA24 at pgs. 313 to 377; AC16 ; AC25; AC27 to AC32; AC35; AC39; at pgs 2935 to 3002 Doc AM, the transcript of the Register; Doc AM1 to AM13, the documentation connected with the registration; AMX1 to 31 is the technical documentation of the vessel; Doc AMY1 to 15 the continuous synopsis record; at pgs 3010 to 3083 Doc SC1 to 14, the documentation necessary for the endorsement attesting the recognition of the Certificates of competence of the crew; Doc SCA 1 to 13; , Doc SCB1 to 12; Doc SCC1 to 14 ; Doc SCD1 to 11; Doc SCE1 to 10.

The arch of the visibility of the bridge of the Sichem Pandora is excellent with no obstructions other than minimal by the mast foreward and in the ballast conditions anything 80m forward of the vessel can be seen.



**C. Data from the Klein Familie.**

1. The fishing vessel KLEIN FAMILIE is a bottom longliner skipper/owned by her master Thierry Goueslain. Year of construction 1968 (vide pg 817) She has the following main particulars:

Registration No.	CH221187
Call sign	FP7613
GMDSS	A1
Category of navigation safe haven)	3 <sup>rd</sup> (up to 20miles from a
Length overall	14.44m
Breadth	5.10m
Depth	1.80m
Freeboard	500mm
Construction	wood
Year built	1968
Power	158kW
Service Speed	9-10knots

2. The underdeck space consisted of four compartments with a fish hold forward abaft of which was the engine compartment. Aft of the engine compartment was the crew's quarters followed by the steering gear compartment at the transom. On the main deck forward there was a hatch giving access to the fish hold followed by the wheel house and an adjoining small galley/mess, aft of which was the working deck which was covered by a permanently fitted awing. The sides of the working deck also had canvas covers for shelter, with the one on port side being permanently rigged and the one on the starboard side being removed when working and hauling in the fishing lines using the fishing line winch on her starboard side just abaft the wheelhouse.
3. She was used to fish for cod, conger eel, rock salmon and ling using about 12 long-lines of 1000m each and each with 290 branch lines with hooks. The lines were stored in metal bins and interconnected to make one long-line. The hooks were usually baited before departure. A fishing trip which lasted around 12 hours with steaming time to the fishing grounds and back taking up about 3 to 4 hours each way

depending on location of fishing ground. Fishing was carried out about by casting the line 1 hour before slack water with the boat running with the current at speed laying out the line with baited hooks from the starboard quarter. Marker buoys with flashing lights were used to mark the end of the lines. The whole operation of laying out the lines would normally take about half an hour. Hauling in would take much longer, usually two to three hours at a speed of 3 to 4 knots.

4. The marker buoys consist of a buoy for buoyancy with a 3m pole attached to it. At the bottom of the pole is a weight to act as ballast and keep the pole marker upright. At the top end of the pole is a flag enabling it to be located by day and two flashing white lights for ease of location at night.
5. Baiting of the hooks was carried out by the deckhands ashore before sailing as was the case on January 5<sup>th</sup> when the deckhands had been baiting since about midnight. The owner/skipper Thierry Gousslain arrived at 04.15 for the fishing trip. He inserted the batteries inside the flashing light lanterns on the marker buoys and the KLIEN FAMILIE eventually left on her fateful trip at 0415. On departure there were in all six crew members on board. Apart from VHF contact with another fishing vessel, the CALYPSO, the last of which was made between 0600/0630, nothing was heard of from the KLIEN FAMILIE anymore. She was subsequently found lying on the seabed in 63m of water in position 49 51.448'N 003 37.137'E. The distance between Cherbourg harbor and the wreck position is 41.5 miles.
6. Moreover there were 3 flickering lights still on, 2 white flickering light on the back bridge, 1 white flickering light at the fore of the wreck, and a fourth fixed yellow light on the same tube as the flickering white light at the fore of the wreck (vide evidence from pg 1382 to 1384).

#### **D.Certification of the Klein Familie**

The certification of the vessel Klein Familie, exhibited by Claude Jean Hubert at pg 795 to 823, shows that whilst the crew of the Klein Familie with the exception of the Master Thierry Gousslain (whose medical certificate had expired four years previous to the incident), were in possession of valid

Certificates. The Navigation Licence of the Sichem Pandora and the Load Line Certificate of the vessel had expired on the 15th of November 2005 and were not renewed there after (vide pg. 810 to 823). Moreover on the date of the incident, the Emergency Position Indicating Radio Beacon (EPIRB) which should have been installed before 1<sup>st</sup> January 2006 had not yet been set up.

**E. Weather Conditions obtaining at the 5<sup>th</sup> of January 2006:**

The weather conditions on the date of the incident were the following:

1. wind direction ESE(120deg. True)
2. wind speed 11.1 knots
3. wave height 3.6ft
4. air temperature 40.60 F
5. Water temperature 51.8 F
6. Visibility 12.4 miles
7. Wind chill 33.4 F (Vide piece 5 feuillet no 2 at pg 501 as translated at pg 739 and 740).

**F. Geographic Position of the wreck of the Klein Familie and site of collision:**

1. From observations of the photographs, DVD footage of the wreck of the Klein Familie and the remnants of the wreck itself (exhibits DOK W1 to W7) it is this Court's considered opinion that the KLIEN FAMILIE suffered catastrophic damage resulting in her immediate sinking. Any hypothesis of the fishing vessel remaining afloat, drifting on the surface for any particular length of time is being dismissed. The devastation of the wreck, together with the testimony of the sole survivor Jean Michel Gueno refute this hypothesis.
2. Photographic evidence of the wreck show that the KLIEN FAMILIE suffered catastrophic damage resulting in her immediate sinking. She was found lying in on her port side with her bow pointing more or less towards the east. She appears to have suffered a blow towards her bow area with the stem twisted to port and the side shell and bulwark

strakes ripped away from the stem to about a third of her length aft up to the bulkhead separating the fish hold from the engine spaces. These frames and side shell formed part of a panel lying detached on the seabed completely separate from the vessel. The line hauler situated close to amidships was still in place and appears intact. (vide piece 30 at pg 640 et. seq.; piece 84 at pg 169; piece 85 at pg 2069 et. seq. ; and dossier of 148 photos DOK PF at pg 3398 together with the underwater videos taken by the French divers piece 54 at pg 1381 and the DVDs by the robot Ulisse on the vessel Argonaute).

3. During all the accounts of his ordeal Jean Michel Gueno gave a very clear account of the events immediately following the collision. ie how he heard a tremendous noise, was ejected from his bunk, reached out for the rung of the ladder, and was engulfed by the currents. On surfacing, there was the life raft floating nearby and Oliver Brusa hanging on to a "ballon" (fishing buoy). **At this moment he could only see the antenna of the bridge.** The liferaft floated close to him but he failed to pull sufficiently at the painter to inflate it. The life raft was pulled down by the sinking boat. He tried to reach Oliver Brusa, however within a few minutes the liferaft resurfaced and Gueno swam back and hauled himself into the liferaft, rowed towards Brusa, jumped back into the sea to assist him into the liferaft but Brusa refused to let go of the ballon. Gueno returned to liferaft and tried to reach Oliver Brusa to no avail.
  
4. It is this description of events given by Gueno which points further to sudden and immediate sinking of the KLIEN FAMILIE. **The fact that both crew members were still at the same location at the time that the Liferaft self-inflated,** following its sinking together with the boat, (eventually activating it when all the painter - length between 15 and 20m - was pulled out), **means that the KLIEN FAMILIE was about 20m to 25m below the surface or nearly half way down to the bottom (depth of 63m) before the liferaft was released and self-inflated.** (vide piece 30 – photo dossier of liferaft of the Klein Familie). Considering that it floated right next to the two crew members in the water above within a very short time-frame, **clearly indicates that the sinking was instant.** For this added reason, the hypothesis that the KLIEN FAMILIE may have remained afloat, drifting for a period after the collision before sinking, is being ruled out.

5. Therefore the geographical position of the wreck coincides with the geographical position of the site of the collision.

### G. Estimated time of collision

#### Evidence

1. The first recollection made by the survivor Mr Gueno after the impact, in the four accounts that he made of his ordeal, **was that it was still dark when he found himself in the water and the night was bereft of moonlight.** Thereafter he describes the following events: ie tugging at the painter, swimming towards Brusa, swimming back for the liferaft that resurfaced inflated, retrieval of the life buoy with light, rowing towards Brusa, jumping into the sea to assist him inside the liferaft, the drifting away of Brusa, the swim back to the liferaft, the waving of the life buoy with light to attract attention of a passing vessel, the finding and the firing of the flares. He stated that by now it was daylight.
2. It needs to be pointed out that Jean Michel Gueno **was not wearing a watch** on the day of the incident.
3. In his account given in the Informal Inquiry (at pg 57 to 62) he gives no estimated time for these activities. In the first account given to the French Authorities, Gueno believed that these events took place within one to one and a half hours before sunrise (vide pg. 729) In the second account given to the French Authorities he estimated that these events took between thirty minutes to one hour (vide pg 832). In the Formal Inquiry before this Court Gueno stated that he could have spent between two to three hours before being rescued (vide pg 2911).
4. It is important to state that the Captain of the Calypso, Mesnage confirms a communication with Thierry Goueslain at **06.15 hrs.** (vide 1496)



5. The ABLAS reported seeing the flares at **0848hrs**. This is the first incontrovertible evidence of time and is corroborated by evidence from Cross Jobourg.

This, together with the data regarding the day break factor and the fact that there was no evidence that Gueno was suffering from the onset of hypothermia will narrow the window of time within which the impact could have taken place.

### G2.Expected Survival Time in Cold Water

<b>Water Temperature</b>	<b>Exhaustion or Unconsciousness in</b>	<b>Expected Survival Time</b>
<b>70–80° F (21–27° C)</b>	<b>3–12 hours</b>	<b>3 hours – indefinitely</b>
<b>60–70° F (16–21° C)</b>	<b>2–7 hours</b>	<b>2–40 hours</b>
<b>50–60° F (10–16° C)</b>	<b>1–2 hours</b>	<b>1–6 hours</b>
<b>40–50° F (4–10° C)</b>	<b>30–60 minutes</b>	<b>1–3 hours</b>
<b>32.5–40° F (0–4° C)</b>	<b>15–30 minutes</b>	<b>30–90 minutes</b>
<b>&lt;32° F (&lt;0° C)</b>	<b>Under 15 minutes</b>	<b>Under 15–45 minutes</b>

The table above given by the United States Search and Rescue Task Force (USSARTF) shows the expected survival times in cold water for the average person. Therefore in water temperatures of 40°F to 50°F, air temperature of 40.6°F and a wind chill of 33.4°F in January, the onset of exhaustion or

unconsciousness sets in about 1 hour. (vide piece 5 at pg501 and translated at pg739).

It should be observed that Gueno, who has a robust stature, after being initially in the water, spent most of his time in the liferaft, where the ratio of heat loss is much lower than if he was immersed in water for all that time.

### G3. Time of Daybreak on the 5<sup>th</sup> of January, 2006

1. Looking at the daybreak factor the Institute of Celestial Mechanics and Calculation of Astronomical Tables gives the following times for Cherbourg for the 5<sup>th</sup> of January 2006 (times UTC+1):

Astronomical twilight	:	07hrs 05min 40 sec
Nautical twilight	:	07hrs 44min 32sec
Civil twilight	:	08hrs 25min 18sec
Sunrise	:	09hrs 04min 31sec

2. Daybreak is the first light of the day which coincides with the nautical twilight, however the 5<sup>th</sup> of January 2006 was a very cloudy day, therefore daybreak would be experienced somewhat later and could be placed somewhere between nautical and civil twilight.
3. These factors, together with the evidence of Jean Michel Gueno, indicate that the time of impact of the KLIEN FAMILIE was not earlier than 0730hrs (local time), which give a period of 1 hr and 18 minutes until the flares were sighted at 08.48 hrs (local time), after which he was rescued by the ABLAS (recovery operation completed at 09.45hrs local time).

Furthermore the estimated time of last voyage of the Klein Familie will further narrow the time window of the collision.

#### **G4. Estimated time of last voyage of the Klein Familie on the 5<sup>th</sup> of January, 2006**

From the evidence given by Jean Michel Gueno we are informed that the maximum speed of the Klein Familie was 12 knots. (vide Doc AC21 at pg 57).

This heavy wooden fishing vessel manufactured in 1968, being a displacement vessel, with an engine of only 150 kW is reasonable expected to have a service speed of 8 to 10 Knots. The position of the wreck of the Klein Familie was (49.51.448'N 003 37.137'E) at a distance of 41.5 nautical miles from Cherbourg Harbour.

The Court and its assessors examined the currents obtaining on the 5<sup>th</sup> of January, 2006. Therefore on the morning in question, after 04.00 hrs the obtaining currents (in accordance to the Admiralty Tidal Steam Atlas – The English Channel – NP250 edition 4) were as follows:

1. One hour after high water Dover (Estimated from time of departure of the Klein Familie at 04.15 hrs), the prevailing tide was approximately 2.7 knots in the Westerly direction (thereby favouring the Klein Familie).
2. Two hours after high water Dover (Estimated from time of departure of the Klein Familie at 04.15 hrs), the prevailing tide was approximately 3 to 4 knots in the Westerly direction (thereby favouring the Klein Familie).
3. Three hours after high water Dover (Estimated from time of departure of the Klein Familie at 04.15 hrs), the prevailing tide was approximately 2.5 knots in the Westerly direction (thereby favouring the Klein Familie).

Therefore this means that the average Westerly tide or currents for the three hours following the departure of the Klein Familie from Cherbourg Harbour were approximately 3.5 knots following.

This signifies that the speed of the Klein Familie on that fateful morning was approximately 12 knots over ground.

#### **H. Vessels in the vicinity**

The recorded monitoring system of sea traffic in the area of Cross Jobourg for the 5<sup>th</sup> of January, 2006 was viewed by this Court and its Assessors at Cross Jobourg Station where the live recorded footage of the trajectory of vessels, together with still images of these trajectories (vide HGCJ1 [at 6.50 hrs GMT], HGCJ2 [at 07.47 hrs and 29 seconds], HGCJ3 [at 06.52 hrs], HGCJ4 [at 07.19 hrs and 43 seconds]) of the 14 vessels passing in the proximity of the wreck of the Klein Familie at the relevant time window were minutely examined. The relevant time and distance of all 14 vessels is the one hereinafter reproduced and differs from the one that appears on the BEAmer report.

The records for monitoring of sea traffic in the area of CROSS Jobourg for that fateful morning was examined by this inquiry at CROSS Jobourg Station and shows a list of 14 vessels which transited the wreck of the Klein Familie at the possible time of collision. This shortlist of traffic in relation to passing of the wreck position (time and distance) according to observations at CROSS Jobourg is as follows:



No	Name of vessel	Jobourg Tracking No.	Time UTC	Closest passing relative to wreck	Speed of vessel
1	UNIVERSUTET SLASKI	186	0519	Passed approx. 0.02 NM (90m) from wreck position	
2	MSC LEA	197	0545	Passed 0.1NM to north of wreck position	17
3	EEMSHORN	166	0600	Passed 0.23NM to the north	
4	ZIEMA ZAMOUSKA	180	0606	Passed 0.25NM south of wreck position	
5	BELARUS	146	0623	Passed 0.8NM north of wreck position	2
6	TORPO	170	0644	Passed 1.3NM south of wreck position	4
7	VIPER	167	0645	Passed 1.4NM to the south	5
8	HELLAS WARRIOR	206	0650	Passed 0.74NM to the north	12
9	SICHEM PANDORA	199	0650	0.3NM to the south	10
10	SEA SHARK	214	0703	1.18NM to the north	
11	SD LOIRE	210	0705	1.39NM to the north	11
12	MARIE SCHULTE	177	0721	Passed 0.57NM to the north	6
13	ID CONTENDER	205	0729	Passed 0.20NM to north	12
14	PIONEER BELLAROUSI	222	0737	On top of wreck	12

1. Considering the damage suffered by the KLIEN FAMILIE and the conclusion of this Court and its Assessors that the sinking was instantaneous, vessels passing in excess of 0.5NM were hereby excluded. This leaves only the UNIVERSUTET SLASKI (No. 186), MSC LEA (No. 197), EEMSHORN (166) the ZIEMA ZAMOUSKA (No.180), SICHEM PANDORA (No. 199), ID CONTENDER (No.205) and the PIONEER BELORUSSI (No.222) to be evaluated for possible involvement in the collision.
  
2. Of these the ID CONTENDER having passed the wreck position at 0729UTC (0.2NM) and the PIONEER BELORUSSI passing over the wreck position at 0737 UTC i.e. **after daybreak**, are being excluded due to :
  - i. The fact that a 20 minutes time-window from impact to the first reporting sighting of the flares at 0848 by the ABLAS, is insufficient for the unfolding of the events described by the survivor;
  
  - ii. The survivor categorically states that the collision happened when it was still dark on a night bereft of moonlight and not after daybreak. This therefore rules out the ID CONTENDER and for the same reason the PIONEER BELORUSSI having passed the area even later are being excluded;
  
3. With regards to the ZIEMA ZAMOURSKA which passed 0.25NM at 0706LT south of the wreck position, the positioning of this vessel on the live trajectory means that the KLIEN FAMILIE would require a speed over the ground of 14.8knots to have arrived at the wreck position for the collision to have occurred with this vessel, something which is highly unlikely given her service speed of 8-9 knots even taking into consideration the obtaining currents. For similar reasons an even higher speed of over 16 knots would have been required for the KLIEN FAMILIE to be at the wreck position when the MSC LEA passed the same spot, or the UNIVERSUTET SLASKI which passed even earlier. As such all three merchant vessels are effectively ruled out of having been involved in the collision with the KLIEN FAMILIE.
  
4. Based on the radar tracking maintained of the SICHEM PANDORA, CROSS Jobourg noted a vector which indicated a maneuver around the

wreck position which investigations later showed as a zigzag maneuver carried out by the SICHEM PANDORA at the wreck position at 0749hrs local/ship's time. Having departed Cherbourg at 0415 local time the KLIEN FAMILIE would have required a speed **over the ground of 11.7knots** to reach the wreck position, a speed which she could have made on that fateful morning given the general westerly tidal currents at the time of her departure, augmented by the north easterly winds which helped her make better speed over the ground than her 8-9knots of service speed. This together with the zigzag maneuver executed by the SICHEM PANDORA at the wreck position and the expanded plot relative to her position at 0800hrs shown in ANNEX 2 and described above, places the SICHEM PANDORA as the prime suspect of having been involved in the fatal collision with the KLIEN FAMILIE.

5. Moreover Port State Control (Paris MOU) inspections were carried out on the vessels identified by Cross and no deficiencies were noted (vide 3261 – 3294). None of the vessels however were subjected to an underwater inspection of the hull.

#### **H. TRACK of the SICHEM PANDORA**

1. The SICHEM PANDORA was on a voyage from Sfax to Flushing where she was to load a full cargo of paraffin for Montreal with her ETA Flushing being for the 6<sup>th</sup> of January 2006. On the morning of 5<sup>th</sup> January 2006 she was navigating through the English Channel, at 06 49hrs she entered the east bound lane of the Casquets TSS setting a course of 075° true. At 0800 the Chief Officer logged her GPS position as 49° 51.8'N 002° 34.8'W before going off watch. What attracted the attention of MRCC Jobourg to the SICHEM PANDORA as a possible vessel involved in the collision which sank the KLIEN FAMILIE, **was a large sudden alteration of course to starboard observed on the radar tracking records for vessel traffic transiting the Casquets TSS at TRAFFIC Jobourg at, what later turned out to be, the geographic position of the wreck.** After the SICHEM PANDORA was diverted to Dunkirk and was boarded by the French Authorities inquiring the disappearance of the KLEIN FAMILIE, **this drastic change of course was indeed confirmed on the course recorder (DOK AC62):**

from 075° to approximately 115° (about 40° as per recorder print within a period of one minute and then immediately returned back to her course just as quickly before overshooting a bit to port and resuming her course slowly. This zigzag maneuver of 40° to starboard and back another 40° to port **was carried out in a span of approximately 2 minutes**. The characteristics of this zigzag maneuver were the **suddenness of the maneuver to starboard, followed by and equally sudden correction** of course back to port”.

(vide Annexe 1 for a detailed and mathematical workings of the anti collision maneuver of the course recorder of the 5<sup>th</sup> of January, 2006, also vide Annexe 1A showing the enlargement of the course recorder Doc AC62 from 6.20 hrs to 07.40 hrs UTC).

2. It should be observed that the raw record of the course recorder shows that this alteration of course was made at 0700 (UTC). However when one examines the course recorder (DOK AC62), from the time of the alteration of course made on entering the Casquest TSS which was logged as 0649 (0549(UTC), it is clear that the course recorded timer was **11 minutes fast**. This however does not affect the data recorded on the course recorder since the recorder clock error remains constant for the period in question.
3. It is this zigzag maneuver which showed up on the monitoring recordings of the SICHEM PANDORA maintained by TRAFFIC Jobourg, which initially attracted the attention of the French Authorities. This maneuver was subsequently **found to have been carried out at or very close to the wreck position**. Plots carried out by CROSS Jobourg which are understood to have used radar plot recordings show the SICHEM PANDORA as having passed **0.3 miles south of the wreck position at 0748 hrs**.
4. This Court and its Assessors furthermore utilized the 0800 GPS position logged by the SICHEM PANDORA itself, as well as the course (075° true) she was following in accordance with the course recorder, together with the GPS wreck



position as recorded by the French minesweeper the Argonaut. By using these positions as GPS direct readings, any error in position fixing, would be reduced or eliminated. (vide Plot in Annex 2).

5. This plot clearly show that the **SICHEM PANDORA** passed approximately **0.15NM mile or (approximately 277 metres) to the south of the wreck position a few minutes earlier**, which if one is to take in consideration the zigzag manoeuvre a few minutes earlier at 0749hrs and the resultant transfer to the south owing swing to starboard (towards the south of the track) would place the actual track followed by the **SICHEM PANDORA even further to the north than shown in the plot in ANNEX 2, placing her even closer to the wreck position.** The distance between wreck and 0800 position is measured at 1.5 miles which is covered in 11 minutes at a speed of 8 knots. This speed tallies with the apparent drop in speed of the **SICHEM PANDORA** recorded by **TRAFFIC Jobourg** where the speed was observed to drop from 9.5 to 7.9 knots over the ground, (as a result of the added distance covered in the zigzag manoeuvre itself).

#### **I. The data of the course recorder vis a vis the evidence of Ogarkov and Belikovs and the crew of the Sichem Pandora.**

1. In the Informal Inquiry pg273 Belikovs held that **10 to 15 minutes before 0800 hrs** he spotted a while flashing light at 5° to 10° to port believed to be a fishing marker about **2 nautical miles away**, alerted the Chief Officer who in turn instructed the change of course:  
**15° rudder, reduced gradually to amidships. Original course was 070°, New Course was 110°/120°.**

In the first French statement (piece 10) at pg559, no new data was given.

In the second French statement, he says that at **07.45 at a distance of 1 to 2 nautical miles**, he spotted the flashing light, alerted the Chief Officer who instructed him to change course:

**Veer hard to starboard, then to amidships, then back to course.**

In the Formal Inquiry at pg273 et seq Belikovs states that he spotted the flashing light between **07.15 hrs and 08.00 hrs** at 5° to port at **1 nautical mile away**. He alerted the Chief Officer who changed course:

**Hard to starboard, after 3 seconds 30° then 20°, then amidships.**

The whole maneuver took around **3 to 5 minutes to complete.**

Ogarikov's testimony in the **Informal Inquiry** pg 74 to 76 is to the effect that he saw the **flashing light at 07.50 hrs** a few degrees to port. He placed vessel in manual steering and instructed the AB to **veer to starboard, then 25°, then amidships. When the light was 0.5 nautical miles behind the vessel, he instructed return to course. That is he waited for approximately 2.7 minutes before returning to port.**

In the first French statement, he stated that **close to the change of watch at 0800 hrs** he effected a maneuver to avoid a white flashing light. It was still total darkness and the **maneuver lasted for five minutes.**

In the second French statement, Ogarikov's stated that **before the change of watch at 0800 hrs**, whilst it was still dark, he effected a maneuver to avoid a fishing light. **He instructed AB to veer completely to starboard.**

In the Formal Inquiry, Ogarikov held that at **07.50 hrs**, he saw a white luminous flashing light **a few degrees to Port**, believed to be a fishing buoy 1 nautical mile away. He ordered **the evasive maneuver hard to starboard, then 20°/25°, to midships, then back on previous course. The maneuver lasted five minutes.**

In all the various accounts of the evasive maneuver, both Ogarikov and Belikovs confirmed that no alarms from either radar system were triggered, no impact shock was felt, no vibrations heard and Belikovs stated that he felt a little heel during the maneuver (vide pg 284).

2. All the crew members of the Sichem Pandora, though vigorously examined by this Court and its Assessors maintained that no impact, shock was felt, no unusual noise was heard, no difference in ship's vibrations or movements were noticed. This Court and its Assessors initially found very hard to believe that during the zig-zag maneuver, there was an absence of ship's movement, vibrations and heel. However further analysis including the data on stability of the vessel Sichem Pandora, which was in ballast, would in effect keep any heel, due to turning, to the minimum. Moreover the moderate head sea prevailing at the time, may have obscured any change in the environmental vibrations.

3. The evidence of both the Chief Officer Ogarkov and Belikovs indicates that the zigzag maneuver was carried out in a normal, almost everyday

practice in navigation to avoid a white luminous flickering fishing marker which maneuver lasted for 5 minutes.

After the initial hard over to starboard, the return to course was a gradual staggered progression to the original course of 075°.

4. The Court and its Assessors, in evaluating the credibility or otherwise of the witnesses above mentioned, adopted the guidelines set out by virtue of Article 637 of the Criminal Code, Chapter 9 of the Laws of Malta which provides:

*“Any objection from any of the causes referred to in articles 630, 633 and 636, shall affect only the credibility of the witness, as to which the decision shall lie in the discretion of those who have to judge the facts, regard being had to the demeanor, conduct, and character of the witness, to the probability, consistency and other features of his statement, to the corroboration which may be forthcoming from other testimony, and to all the circumstances of the case”.*

Apart from the glaring inconsistencies in their testimony (highlighted in bold, as to the time, the distance of the first sighting of the light, the position when first sighted, the duration of the maneuver, and the reason necessitating the zigzag maneuver, the time and distance and position of the initial sighting of the luminous fishing marker and the duration of the entire zigzag maneuver) is **refuted by the clear, precise and incontrovertible evidence contained in the data of the course recorder of the Sichem Pandora (Doc AC62)**. This is for the following reasons:

- i. The luminous fishing marker was first sighted at 2 nautical miles which at the obtaining speed of the Sichem Pandora of approximately 11 Knots translates into 10.9 minutes of steaming time. Even if one had to recalibrate for the “reconsidered” distance ie 1 nautical mile, this translates into 5.4 minutes of steaming time, therefore ample time to veer gently by a few degrees to avoid the fishing marker without the necessity of changing over from autopilot to manual steering.
- ii. As stated above, the zigzag maneuver from start to completion took place within approximately 2 minutes. Therefore such a maneuver **would not have achieved the intended result** ie the

avoidance of the fishing marker but **rather the opposite would be true** ie the fishing marker would still have been in the ship's track at the end of the maneuver:

Workings: Considering that the Sichem Pandora was travelling around 11 knots, she would have covered only 3.6 cables in 2 minutes ie that is 0.36 nautical miles through the water, thereby leaving the fishing marker (whether at 1 or 2 nautical miles) well within the ship's track.

- iii. It is clear therefore that the target that necessitated the zigzag or the anti-collision maneuver was evidently much closer than Ogarkov and Belikovs claim.
- iv. It is highly unlikely that a hard over helm order as illustrated by the course recorder of the Sichem Pandora was carried out merely to avoid a fishing marker. The urgency of the executed maneuver ie hard over to starboard, coupled with the immediate return to port signifies an attempt to avoid a more serious target and is indicative of a crisis.
- v. The hard over wheel in open sea is associated with circumstances of utmost urgency necessitated by situations of imminent collision or danger. It is a maneuver that causes:
  - (a) excessive structural stress on the rudder itself;
  - (b) Marked engine overload;
  - (c) Possible excessive ship's heeling, particularly so for "tender" stability conditions;
  - (d) loss of speed and reduction of overall efficiency;

Therefore after having examined the guidelines proffered in Article 637 of Chapter 9 of the Laws of Malta, this Court and its Assessors find that the accounts of Ogarkov and Belikovs cannot be accorded credibility on account of the fact that they are inherently inconsistent and are discredited by the scientific data of the course recorder.

5. The sighting of a quick flashing white light is confirmed by both the Chief Officer and the lookout. This sighting is also associated with the zigzag maneuver carried out by the Sichem Pandora as recorded in her course recorder and at Traffic Jobourg. Additionally the radar plot maintained by Traffic Jobourg also placed this maneuver at or near the wreck position. However despite three aircraft, two patrol boats and two lifeboats being involved in the intensive search for other crew members no quick flashing white markers lights or buoys were

discovered floating in the vicinity of the wreck/zigzag maneuver position. Moreover investigations by the French Authorities never revealed any other flashing marker lights belonging to or claimed by any other fishermen in the immediate area. **The only white quick flashing white lights that were found were those still on the deck of the wreck of the Klein Familie lying on the seabed which were still flashing up to two days after the incident.**

6. Furthermore none of the statements given by Gueno substantiate the allegation of the defense counsel of the Sichem Pandora that the vessel avoided a fishing marker but may have hit some debris of the wreck. This scenario presupposes a drastic anti-collision maneuver happening **after** the sinking of the Sichem Pandora with the survivor afloat nearby. However Gueno at no time alleged that he was nearly rammed by or was in the track of an on-coming vessel which undertook this anti-collision maneuver.

7. Furthermore, Gueno alleged in the Informal Inquiry that he believed the vessel that collided with the Klein Familie had a blue hull with yellow pipes. In later statements he said that he was in shock and therefore was not certain of what he saw.

A Vessel moving at 10 knots covers a distance of 308 metres in one minute. Furthermore the line of vision from the sea level makes it rather difficult, if not impossible, to see beyond the deck edge of a ship. In addition by the time that the vessel has achieved the distance to enable someone afloat on the surface to observe the main-deck of a ship, the vessel would have been engulfed in darkness. For all these reasons this Court and its Assessors could not, in conscience, give much weight to the description of the vessel from Gueno and this quite apart his psychological and physical state of shock.

#### **J. Analysis of expert reports to paint analysis.**

This Court and its Assessors examined at great length the paint samples implications in this Formal Maritime Inquiry. Following the French report, it was deemed necessary to appoint Pharmacist Mario Mifsud and Inspector Ellul to conduct similar analysis of the paint samples taken from the hull of the Sichem Pandora and the wreck of the Klein Familie by the French divers.



Because of the diametrically opposing results, the Court deemed it prudent to appoint Peter Moore of Minton Treharne and Davies Limited to conduct the most discriminative analysis available – at great expense.

The defense then produced Trevor Jones, who did not conduct any chemical analysis of samples but gave a critical appreciation of all three reports.

The Court and its Assessors need to point out at this stage that all three laboratories used the same three techniques on similar apparatus. The analysts stated that after an initial visual observation they used the Fourier Transform Infrared Spectroscopy,(FTIR) which is an Infrared based technique used to identify the organic composition of paints; The Raman Spectroscopy which is a laser light based analytical technique used to identify the composition of paints; and the Energy Dispersive X-Ray Analysis which is analytical technique used for the elemental analysis or chemical characterization of paint.

Samples in the French and Maltese reports retain their original numerations ie prelevement 7 to 16 or samples 7 to 16. The English report marks the same samples progressively from 1 to 10.

In the Maltese / French reports:

7-9 are samples from the Sichem Pandora;

10-16 are samples from the Klein Familie;

While in the English report:

1-3 are samples from the Sichem Pandora;

4-10 are samples from the Klein Familie;

A brief synopsis of the French report and testimony of the French analyst Stephane, Gosse and Partouche is to the effect that the green marks on samples 8 and 9 of the Sichem Pandora match the green sample 12 of the Klein Familie, while orange mark sample 9 of the Sichem Pandora match the orange paint 14(1) of the Klein Familie and light green sample 9 of the Sichem Pandora match sample 14 of the Klein Familie.

The mixture of red and white of sample 9 of the Sichem Pandora match pink smears of sample 16 of the Klein Familie.

English synopsis by Peter Moore

Concludes that:

1. sample 2 and 3 of the Sichem Pandora is similar to smeared paint of sample 9 and 10 of the Klein Familie.
2. Light green in 2 and 3 of the Sichem Pandora have high degrees of FTIR and visual similarity to sample 8 of the Klein Familie.
3. Paint smears of the Klein Familie are similar to the paint on Sichem Pandora.


Therefore similarities between areas of material transfer was consistent with transfers of material following a collision (vide pg3794).

Synopsis of the Part I of the Maltese Report is to the effect that there was no elemental similarity in the pattern and concentration observed between the paint samples for the Sichem Pandora and the Klein Familie (vide Doc MM).

With regards to Doc MMM, it was true that the analysis by Raman spectroscopy, the spectra showed similarity between the paints. However after the experiment with paint samples from the green paint elevated from a door of the General Police Headquarters (Doc MX and Doc MX1 and Document marked Addendum MMM, showed that this technique is not sufficiently discriminatory as regards the resinous part of the paint. The Maltese report furthermore concludes that due to the effects of contamination from sea water and the effects of corrosion on the samples, the only conclusion that could be reached was that contact between the vessels could not be excluded.

Deliberates:

A through examination, however of the actual spectra and scientific results do not in fact reveal that these paints are identical. In fact the comparative analytical results of sample 9 of the Sichem Pandora with sample 14 of the Klein Familie show that they contained magnesium, aluminum, silicone, sulphate, calcium, titanium, iron – **However one spectra contains Barium and the other lacks aluminum.**



In the comparative analysis of sample 9 of the Sichem Pandora with sample 16 of the Klein Familie, the common elements cited were magnesium, aluminum, silicon, sulphur, potassium, calcium, titanium and iron. **However one spectra does not contain aluminum, sulphate, potassium, titanium and iron.** Furthermore **no copper and zinc** were found in the **pink smears of sample 16 of the Klein Familie.**

The apparent similarity in the green paints between the vessels (ie sample 8 and 9 of the Sichem Pandora) with sample 12 of the Klein Familie **is not supported by evidence since there is only an infrared spectra for sample 8 – which does not match anything.**

In addition Sample 10B of the Klein Familie, contains 59% lead and 35% barium whilst yellow and orange paint of the Klein Familie contains lead and chromium. Sample 15 of the Klein Familie also contains potassium, all of which seem to be unique elements – none of which are found in the paint samples of the Sichem Pandora.

Moreover Sichem Pandora's anti-fouling paint contains high concentration of copper and zinc which do not seem to match elements found in the red smear samples 15 and 16 of the Klein Familie.

The technique used to test the similarity of the resinous part of the paint between the green and light green paints of both vessels **is not sufficiently discriminatory** as the results of Doc MX, MX1 and Document Addendum MMM clearly demonstrate.

It is pertinent to add at this stage that there is **no international database for marine paints** as there is for vehicle paints/sprays. Whatever the differences or similarities adduced, there is therefore no way of determining the **percentage probability of matching** the paints. Furthermore no ratio was given by the analysts for false positives.



The matter is more confounded by the realization that vessels plough the oceans and seas which contain similar elements to those that form an inherent part of the paint. Therefore the elements of ocean and sea water may contaminate marine paint samples.

The areas chosen for the prelevement of the samples, the size of the paint samples are of vital importance and ideally need to be one centimeter square. The number of tests conducted in different areas of the same sample are equally critical if one desires to achieve a true picture of the whole. The comparison of the testing of a raisin, rather than the cake that also contains raisins, is a vivid explanation of the difficulties encountered with paint samples of less than a square centimeter when that paint sample relates to the hull of a vessel.

**Therefore and for all these reasons, the Court and its Assessors may only conclude that they cannot exclude contact between the Sichem Pandora and the Klein Familie.**

#### **K. Deficiencies of the Klein Familie**

As was illustrated above (vide section C Data from the Klein Familie), the fishing vessel the Klein Familie had several deficiencies which include:

1. expired Navigational Permit (valid till November 2005).
2. expired Load Line Certificate (valid till November 2005).
3. the Emergency Position Indicating Radio Beacon (EPIR) scheduled to be operative by the 1<sup>st</sup> of January, 2006, had not yet been installed. There is no documentary evidence to contradict this and no such equipment was evidenced in the photo dossiers and videos of the wreck.
4. The medical certificate of the Master of the Klein Familie Thierry Goueslain had expired on the 4<sup>th</sup> December, 2001 and had not been renewed every subsequent year.

In addition, there is satisfactory proof that Goueslain suffered from a heart condition and from sleep apnea. The evidence Chantal Colombel and Alain Lettelier are significant in this regard. This Court and its Assessors found no evidence of harassment of witnesses that is implied by counsel to the missing crew and the survivor of the Klein Familie (vide note of submissions at pg. 4682 - 4683).

**L. Responsibility and Breaches of the International Convention on the Prevention of Collision at Sea dated 1972 as amended:-**

The Court and its Assessors after analyzing all the evidence in the Maritime Inquiry, and having considered the submissions of counsel to both vessels shall embark on the examination of the International Regulations for Preventing Collisions at Sea 1972 as amended. Indeed Rule 5 of the above Convention states categorically:

“Every vessel shall at all times maintain a proper look-out by sight and hearing as well as by all available means appropriate in the prevailing circumstances and conditions so as to make a full appraisal of the situation and of the risk of collision”.

The Court upholds as true the submissions proffered by the Sichem Pandora, in that all the ship’s certification was in order, the ship’s navigational equipment duly certified and fully functioning. Furthermore, this Court and its Assessors uphold the fact that no alarms were registered or set off in the course of the Sichem Pandora’s voyage on the 5<sup>th</sup> of January, 2006 in the English Channel.

Indeed on the morning of the 5<sup>th</sup> of January, the visibility was good as logged “visibility state 7” on the Deck Log of the Sichem Pandora as well as on the pg737 which is the official weather report given at Cross for the day in question.

State of the art navigational tools and equipments however do not supplant the primary obligation set out by rule 5 ie "a proper look-out by sight and hearing".

There was no meteorological phenomena, hampering the keeping of a proper look-out **by both vessels**. The arch of visibility both in the horizontal plane together with the visibility in the perpendicular plane on the Sichem Pandora is excellent with no obstructions other than minimal by the mast forward and in the ballast condition anything 80m forward of the vessel can be seen.

With regards, to the evidence of the Chief Officer Ogarkov and the AB Belikovs on watch at the time of the fateful incident, **the very fact of the necessity of the drastic helm movement**, in itself, is evidence that the standard of look-out kept on the Sichem Pandora was not as attentive as it should have been.

Given that the Klein Familie was a small vessel capable of using helm and engine control maneuvering to effect quick and rapid avoiding action or extricate itself from close quarter situations vis a vis other vessels, even at the last moment, the Court and its Assessors conclude that the Klein Familie was not maintaining a proper look-out and appraisal of the traffic situation surrounding her vicinity.

The obligation of a proper **look-out was incumbent on both the Sichem Pandora and the Klein Familie** and the Court and its Assessors adduces a **breach of Rule 5 on the part of both the vessels Sichem Pandora and the Klein Familie**.

In addition, Rule 5, in the circumstances obtaining in this Inquiry, must necessarily be viewed in conjunction with Rule 7, regarding the assessment of risk of collision.

This Court shall also evaluate the applicability or otherwise of Rule 16 and 17 of the same International Convention regarding the action by the give-way vessel and the action by the stand-on vessel:

In an encounter between vessels in good visibility there is the give-way vessel and the stand-on vessel. The action by the give way vessel is governed by Rule 16 of Convention which states:

“Every vessel which is directed to keep out of the way of another vessel shall so far as possible take early and substantial action to keep well clear”.

○ Rule 17 provides that:

(A) (i) “Where one of two vessels is to keep out of the way the other shall keep her course and speed.

(ii) The latter vessel may however take action to avoid collision by her manoeuvre alone, as soon as it becomes apparent to her that the vessel required to keep out of the way is not taking appropriate action in compliance with these Rules.

(b) When, from any cause, the vessel required to keep her course and speed finds herself so close that collision cannot be avoided by the action of the give-way vessel alone, she shall take such action as will best aid to avoid collision”

○ It is evident that for a collision to occur on the open sea such as the case in examination there must be a combination of breaches and lack of observance of these Rules by both vessels involved.

In the note of submissions vide pg4843 and 4844, the counsel to Sichem Pandora claims several breaches under Rule 10 of the International Convention above indicated which governs the conduct of vessels when traversing traffic separation schemes:

Rule 10b states:

(b) “A vessel using a traffic separation scheme shall:



(i) proceed in the appropriate traffic lane in the general direction of traffic flow for that lane;

(c) A vessel shall, so far as practicable, avoid crossing traffic lanes but if obliged to do so shall cross on a heading as nearly as practicable at right angles to the general direction of traffic flow.

(i) A vessel engaged in fishing shall not impede the passage of any vessel following a traffic lane.

(j) A vessel of less than 20 metres in length or a sailing vessel shall not impede the safe passage of a power-driven vessel following a traffic lane”.

It is the Court and its Assessors' considered opinion that in the absence of records or testimony positively indicating the **precise course or heading** engaged by the Klein Familie, **this Court cannot entertain the breaches cited under Rule 10b(i) and 10(c)**. Furthermore, there is no evidence that the Klein Familie had in fact **already embarked on her fishing activity** and started to release her lines. Indeed the photo dossier of the wreck shows that all lines were in close proximity of the wreck. **Therefore the claim to the effect that there subsists a breach of Rule 10(i) is being denied.**

The Court and its Assessors are of the opinion that since the position where the collision took place was within the Traffic Separation Scheme, **Rule 10(j)** applied to the Klein Familie which was indeed the give way vessel by virtue of the fact that she was **less than 20 meters in length**, thereby obliged not to impede the passage of a larger vessel following the Traffic Separation Scheme. Therefore the Klein Familie, **as the give-way vessel, was obliged to take avoiding action in accordance with Rule 8 and 16.**

In the note of submissions of the Sichem Pandora, strong emphasis is made regarding the radar and associated guard ring alarms and their being fully operational. This Court cannot stress sufficiently however the dangers of over-reliance on such an alarm system. This in particular applies with regard to detecting small vessels with weak radar returns, such as those of the Klein Familie. Even with an efficient radar reflector, a moderate sea state creates radar clutter especially close to the ship (approximately within 2 miles), which in turn would necessitate the use of anti-clutter control. Excessive use of anti-clutter control however in turn suppresses the weak echoes produced by

radars similar to those of small wooden fishing vessel. **It is vital therefore to keep a keen visual lookout at all times.**

One very significant fact in this incident is that the Klein Familie had the flashing marker buoys **on for the entire period since its departure from Cherbourg.** This is in contravention of Rule 20(b) of the above mentioned Convention which states that:

“The Rules concerning lights shall be complied with from sunset to sunrise, **and during such times no other lights shall be exhibited, except such lights as cannot be mistaken for the lights specified in these Rules or do not impair their visibility or distinctive character, or interfere with the keeping of a proper look-out”.**

It is this Court considerate opinion from evaluating the evidence adduced from this Inquiry that the flashing whiter marker lights of the Klein Familie may well have interfered its own navigation lights from being seen by other vessels.

Apart from interferred of navigation lights, the flashing marker lights may have been confusing and misleading when exhibited from the deck of a moving fishing vessel. Flashing marker lights are intended to be stationary in the water and one would not expect them to be on the deck of a moving vessel.

Indeed this is the likely scenario underlying the circumstances leading to this incident. It is probable that the flashing lights, observed earlier by Chief Officer Ogarkov and lookout Belikovs, would have been assessed as stationary fishing marker lights; they would not have given them much thought; only to realize at a much later and critical stage, that the lights were actually stowed on the deck of a moving fishing vessel which necessitated the execution of the zigzag maneuver in order to try to avoid the vessel.

The Court and its Assessors therefore concludes that the Sichem Pandora was indeed involved in a collision with the Klein Familie on the 5<sup>th</sup> of January, 2006

and find that the collision was in breach of the following Rules of the above mentioned Convention for the Prevention of Collisions at Sea:

**That the vessel Klein Familie was in breach of:**

- a. Rule 5 (failure to keep a proper lookout);
- b. Rule 7 (failure to assess risk of collision by all available means);
- c. Rule 8 (action to avoid collision);
- d. Rule 10(j) and Rule 16 (action by give way vessel by virtue of Rule 10 (j), i.e. less than 20 meters not to impede the passage of a larger vessel);
- e. Rule 20(b) the obligation, whilst underway, to ensure that from sunset to sunrise, no other lights shall be exhibited, except such lights as cannot be mistaken for the lights specified in these Rules or do not impair their visibility or distinctive character, or interfere with the keeping of a proper look-out.

**That the vessel Sichem Pandora was in breach of:**

- f. Rule 5 (failure to keep a proper lookout);
- g. Rule 7 failure to assess risk of collision by all available means);
- h. There also appears to be a breach of Rule 17 action by stand on vessel as soon as it becomes apparent that the give way vessel is not giving way, but this is somewhat mitigated by the flashing white lights on board the Klein Familie which may have misled the Sichem Pandora until it was too late to avert collision.

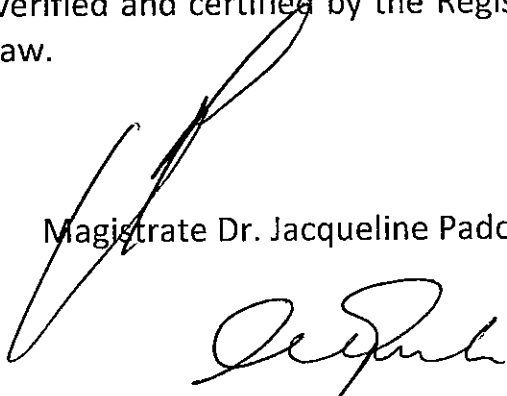
It is the considered opinion of this Court and its Assessors therefore that with reference to the **First Question or Task of this Maritime Inquiry** that there is compelling evidence that shows that:

1. the **Sichem Pandora was involved** in the sinking of the Klein Familie on the 5<sup>th</sup> of January, 2006 whilst traversing the English Channel;
2. That the **First Two Decisive Factors** for the collision between the two vessels was the lack of proper look-out of the two vessels ie the Sichem Pandora and the Klein Familie;
3. That the **Third Decisive Factor** for the collision was the violation of Rule 20(b) on the part of the Klein Familie that is, the obligation, whilst underway to ensure that from sunset to sunrise, no other lights shall be exhibited, except such lights as cannot be mistaken for the lights specified in these Rules or do not impair their visibility or distinctive character, or interfere with the keeping of a proper look-out.
4. That the **Contributing Factors** to this collision were:
  - a. the poor health of the Master of the Klein Familie;
  - b. the poor radar signature of the Klein Familie.

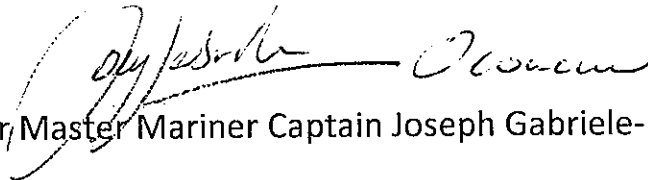
Therefore and with reference to the Second Question or Task put to this Maritime Inquiry, it is this **Court's considered opinion that the persons responsible for this Maritime Casualty were Chief Officer Vasilij Ogarkov and AbleSeaman Alexandrs Belikovs**. Therefore the Court orders that Criminal proceedings be instituted against Ogarkovs and Belikovs in terms of Art. 225 of the Criminal Code, Chapter 9 of the Laws of Malta, for the involuntary homicide of Franck Herouville, Ludovic Herouville, Frederic Terpereau, Olivier Brusa, Thierry Goueslain and for breaches of Article 305, 306 and 307 of the Merchant Shipping Act Chapter 234 of the Laws of Malta, that is, for the breach of the obligation to assist vessels in distress, for the breach of the duty to render assistance to persons in danger at sea and for the breach of the mandatory duty to report accidents to ships.

Therefore in terms of Article 315(6), 316 of Chapter 234 of the Laws of Malta, and Article 7(12) (13) of Subsidiary Legislation 234.11 under Chapter 234 of the Laws of Malta, orders that this report of the Formal Maritime Inquiry be transmitted to the Prime Minister, the Minister and a duplicate of the report be verified and certified by the Registrar of Court as correct and this in terms of Law.

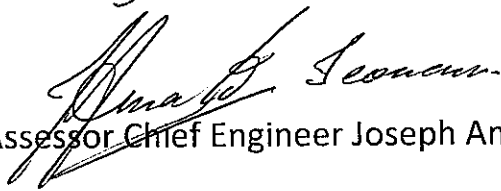
Magistrate Dr. Jacqueline Padovani



Assessors Master Mariner Captain Mario Grech - I concur



Assessor Master Mariner Captain Joseph Gabriele- I concur



Assessor Chief Engineer Joseph Amato- I concur



**Flavia Marmara**  
PA to Permanent Secretary  
MITC

# Annex 1

## Sichem Pandora's Course Recorder trace analysis (ref: Doc AC 62)

### Note:

Time and course measurements are approximate due to small scale of record, however, particularly when cross-referenced and correlated with other evidence, extracted data gives a reliable general picture of events.

### Analysis

The record shows that at 0700 Hrs (course recorder time) the ship carried out a sudden and very rapid alteration of course to starboard, indicated by the sharp change of direction of the trace (Ref: Point D) to the right.

The trace continues nearly horizontally to the right across the paper indicating that the ship's head was going to starboard very rapidly (Ref: Line E).

The elapsed time between the original heading of 070° and the new heading of 115° is barely detected by the timing mechanism of the course recorder, confirming a very rapid alteration of course. Indeed, the trace coincided with the 0700 Hrs thick, red line on the recorder paper. The thickness of the 0700 Hrs red line represents a time period of under one minute.

**In layman's terms, the time taken for the *Sichem Pandora* to carry out to carry out the first part of the maneuver (from Point D to B in Annex 1A) is approximately one minute.**

At Point B, the trace does not progress vertically at all on the time scale, indicating that the ship reached a heading of 115° only momentarily.



Jacqueline Padovani LL.D., LL.M.(IMLI)  
MAGISTRAT

From 115° (Ref: Point B), the trace returns back to the left nearly horizontally across the course recorder paper down to a heading of 075° (Ref: Point G), indicating yet another sudden and very rapid alteration and of course to port (Ref: Line F).

The trace shows that the vertical (time scale) progress of the trace between Points B and G is nearly the same as that between Points D and B.

**In layman's terms, the time taken for the *Sichem Pandora* to carry out the second part of the maneuver (from Point B to G in Annex 1A) is approximately one minute.**

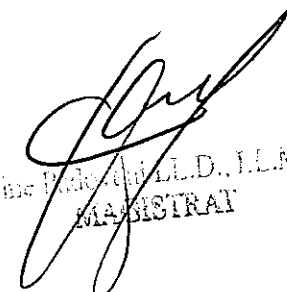
The trace shows an appreciable increase in the vertical (time scale) progression between the headings of 075° (Ref: Point G) and 070° (Ref: Point H), thus indicating a much slower rate of turn to port, as would be characterized by the easing off of the helm to amidships, followed by the application of counter-rudder.

The trace further shows that the ship overshot the original heading of 070° by approximately 7°, reaching a heading of 063° (Ref: Point I). From then, the ship was gradually brought back onto a heading of 072° (Ref: Point C).

**The trace on the course recorder shows that the time elapsed from the last moment when the ship was on the original heading of 070° (Ref: Point D), through 115° (Ref: Point B) and back to a heading of 075° (Ref: Point G) is under 2 minutes.**

**In layman's terms the entire zigzag maneuvering took approximately 2 minutes.**

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