

MARINE OCCURRENCE REPORT

CLOSE QUARTERS/PHYSICAL CONTACT
BETWEEN
“ORHAN EKINCI” BULKCARRIER AND
“BUM DONG” CHEMICAL TANKER
AT CONSTANCE BANK ANCHORAGE,
OFF VICTORIA, BRITISH COLUMBIA

25 JULY 1997

REPORT NUMBER M97W0149

The Transportation Safety Board of Canada (TSB) investigated this occurrence for the purpose of advancing transportation safety. It is not the function of the Board to assign fault or determine civil or criminal liability.

Marine Occurrence Report

Close Quarters/Physical Contact

Between
ORHAN EKINCI
Bulkcarrier
and
BUM DONG
Chemical Tanker

At Constance Bank Anchorage, off Victoria, B.C.
On 25 July, 1997

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Summary

On 25 July, 1997, the m/v "ORHAN EKINCI", while approaching Victoria pilot station, deviated from the traffic lane and advanced towards the chemical tanker "BUM DONG" anchored at Constance Bank. While passing ahead of the latter the starboard quarter of the "ORHAN EKINCI" scraped the bow of the "BUM DONG". Each vessel sustained some minor damage in the vicinity of the area of contact.

Ce rapport est également disponible en français.

Factual Information

	"ORHAN EKINCI"	"BUM DONG"
Port of Registry	Istanbul	Busan
Flag	Turkey	South Korea
Registry/Licence Number	6627	7925027
Type	Bulk Carrier	Chemical Tanker
Gross Tonnage	22,085	9,751
Length	186.21 m	135.5
Draught	6.00 m	8.48
Built	1982, Osaka, Japan	1980, Busan, Korea
Propulsion	One Diesel, 12000 BHP	One Diesel, 8040 BHP
Number of Crew	28	25
Number of Passengers	Nil	1
Registered Owner	Gemek Shipping, Istanbul	Pan-Ocean Shipping, Seoul

Constance Bank lies south of Victoria, B.C., approximately two nautical miles south-east from Victoria Pilot boarding area and east of an inbound traffic lane. It has good holding ground with the depth ranging from 18 to 50 m and is recommended as an anchorage for ships in the Strait of Georgia.

The occurrence took place in daylight, the weather was reported as clear with westerly winds between 15 and 25 knots and good visibility. Geomatic Engineering of the Canadian Hydrographic Service estimated that, at the time of the occurrence, the surface current in the vicinity of Constance Bank was setting eastward at a velocity of 1.5 to 2 knots.

Orhan Ekinci

The m/v "ORHAN EKINCI" was in ballast and en route to Vancouver, B.C. from Okpo, South Korea, where she had undergone a refit in a floating dry-dock. The whole hull was repainted black. On completion, the vessel was pulled straight astern by tugs from the flooded dock. No contact with the sides of the dock was recorded.

After leaving the floating dock, the "ORHAN EKINCI" anchored at Okpo road and, one day later, on 12 July, 1997, departed for Vancouver. En route to Constance Bank, the vessel did not contact, berth or moor alongside any ship or structure.

The vessel's propulsion, steering and navigation equipment were reported to be in good working order.

On 25 July, 1997, at approximately 1930 the "ORHAN EKINCI" passed Race Rocks lighthouse and entered the northbound, inbound traffic lane. Vancouver Marine Communications and Traffic Services (MCTS) contacted the vessel, using her call sign TCON, and advised of two other vessels ahead, i.e. the tanker "BUM DONG" anchored at Constance Bank and the ferry "COHO" departing Victoria bound for Port Angeles, Washington. A review of the taped communication shows that the "ORHAN EKINCI" responded and, without explicitly acknowledging the MCTS information, advised MCTS that she would be proceeding towards Victoria pilot station.

The "ORHAN EKINCI" was on hand steering with four persons in the wheel-house: the master; the chief officer; the helmsman and the lookout. Reportedly, the second officer paid a brief visit to the wheelhouse prior to assisting the pilot to board. The data relating to the passage from Race Rocks to the pilot station recorded by the vessel on the chart, in the log-book and as reported to TSB are not consistent. Further discrepancies exist between the vessel's and MCTS records pertaining to this leg of the passage.

An entry in the log book of the "ORHAN EKINCI" shows that the vessel was in 48°12.0'N, 123°27.0'W at 1928 (1828 ship's time)¹, that this fix was obtained by Global Positioning System (GPS) and that course was altered to 023°(T). A fix plotted on the ship's chart for the same time, however, indicates that the vessel was in position 48°13.3'N, 123°28.2'W.

From 1928 until 2030, three more fixes were plotted on the vessel's chart: at 1948 (1848); at 2002 (1902) and at 2026 (1926). The vessel's speed over ground between the charted positions of 1928 and 1948 was calculated as being 12.6 knots. Between 1948 and 2002 the speed was calculated as being 15 knots. The master reported that the "ORHAN EKINCI" was proceeding at a maneuvering speed of approximately 12 knots and that a surface current was setting in a south-easterly direction, further reducing the vessel's speed over ground. The master also reported that at 2002 (1902), the vessel's speed was 6 knots.

The radar target of the "ORHAN EKINCI" was tagged "ORHK" and monitored by MCTS Vancouver. Its coordinates were recorded by the MCTS computer at intervals of approximately 5 minutes. The record shows that the "ORHK" passed Race Rocks and entered the northbound traffic lane by gradually altering course to port between the times 1916 and 1930. At 1926:15 the target was in a position 48°13.0N, 123°28.3'W which correlates with the fix plotted on the vessel's chart at 1928 (1828).

The two fixes on the "ORHAN EKINCI'S" chart, at 1948 and at 2002, differ substantially from those recorded by MCTS. The ship's fixes of 1948 and 2002 are approximately 1.2 miles north-north-west and 2.2 miles north-by-west, respectively, of the positions of the radar target "ORHK" recorded by MCTS at corresponding times. Both the vessel's fixes showed the vessel to

¹ The clocks on the "ORHAN EKINCI" were one hour slow on PDT. Ship times are shown thus (1828) following the time in PDT.

be within the traffic lane. The MCTS record shows that, at 1948 and 2002, the radar target "ORHK" was to the east of the eastern boundary of the traffic lane by distances of approximately one and nine cables, respectively.

During the investigation, the crew of the "ORHAN EKINCI" was interviewed twice. At the first interview the chief officer stated that the vessel was approaching Constance Bank on a heading of 035°(T), with the telegraph set to 'Half-Ahead'. This telegraph setting would give a speed of approximately 10 knots. The chief officer saw a vessel anchored at Constance Bank with her bow pointing towards the west. The visibility was approximately 6 miles and the distance from the "ORHAN EKINCI" to the anchored vessel was about 4 miles when he first saw her. The anchored vessel was later identified as the red-hulled "BUM DONG".

The chief officer observed that the "BUM DONG" was on the "ORHAN EKINCI'S" port side. Using the gyro repeater and azimuth mirror mounted on the wheel-house bridge-front forward bulkhead, he checked the bearing of the other vessel. It was approximately 025°(T) and did not change appreciably as the "ORHAN EKINCI" approached the "BUM DONG". He also reported that, at some time before his vessel passed the "BUM DONG", Vancouver MCTS (VTS) called the "ORHAN EKINCI" to ask where the vessel was going. The master answered the VTS call and altered course to port. The "ORHAN EKINCI" passed ahead of the "BUM DONG".

The information obtained from the chief officer during his first interview correlates with the MCTS record of the geographical coordinates of radar target "ORHK" and the MCTS recording of radio communications.

According to MCTS records, from 1926:15 until 2008:14 radar target "ORHK" was proceeding towards Constance Bank at a speed of approximately 10.2 knots on a course of 032°(T) and the bearing from "ORHK" to radar target "C867" was 025°(T). As the distance between the two vessels decreased, the MCTS record showed minor fluctuations in the calculated speed, course and bearing (see Appendices A, B and C). At about 1945 target "ORHK" exited the northbound traffic lane. At 2012 MCTS called the "ORHAN EKINCI" and asked for her intentions. In response, the master advised that he had altered course to port.

During the second interview the chief officer stated that when the "ORHAN EKINCI" was approaching Victoria pilot station, the "BUM DONG" was observed on the starboard side throughout. He did not remember any substantial course alteration to port in the vicinity of Constance Bank. He stated that the master was in command but the 2002 (1902) fix on the chart had been plotted by the second officer who was not on watch but was in the wheel-house to be available to assist the pilot when he boarded. The coordinates of the fix are recorded in the vessel's log book in the 1600-2000 watch.

During the first interview the master estimated that the closest distance ever between the two vessels was approximately 50 m. When interviewed the second time he reported that the "ORHAN EKINCI" proceeded within the northbound traffic lane throughout. He also reported that, when the starboard midship of the "ORHAN EKINCI" was passing ahead of the bow of the "BUM DONG", he observed and estimated the distance between the two vessels as being approximately 25 m. He reported that he did not order a course alteration at this moment and

that he did not know the distance between his vessel's starboard quarter and the bow of the "BUM DONG" when the "ORHAN EKINCI" was passing ahead of the other vessel. The master confirmed that a south-easterly current (135°) was setting his vessel to starboard.

When making the written Report of a Marine Occurrence, the master reported that the "ORHAN EKINCI" was proceeding at a speed of 6 knots and passed the "BUM DONG" at 2015 (0315 UTC) in a position 48°21.3'N, 123°22.0'W. When compared to other available data, this position lies approximately 11.5 cables north from the position of the "ORHK" target recorded by the MCTS when it merged with the target of the "BUM DONG" at approximately 2013:50.

Except for the log book entries and the positions laid off on the vessel's chart, no other record of courses or positions relevant to the vessel's approach to Victoria pilot station was found on board the "ORHAN EKINCI".

During the first interview the master reported that the vessel was not equipped with a course recorder. The chief officer stated that the course recorder was not working properly. On 26 July, 1997 the course recorder, part of the vessel's wheel-house equipment, was inspected. It was found to be operational but the trace recorded on the paper roll in the instrument did not indicate either the courses steered or the time period of the approach to the pilot station.

The helmsman and lookout, who were also in the wheel-house, remembered seeing a red ship in the vicinity of the bow of the "ORHAN EKINCI". Neither remembered the courses steered, the rudder orders given or other information which could allow for a resolution of the vessel's varying accounts of the events on 25 July, 1997. None of the four individuals recalled being on the starboard bridge wing and observing the passing of the "BUM DONG".

Bum Dong

The tanker "BUM DONG", loaded with vegetable oil and caustic soda, arrived at the Constance Bank anchorage on 25 July, 1997 at approximately 1700² and was ordered to wait until her discharge berth in Vancouver harbour was available. The vessel anchored with 5 shackles of anchor chain in the water and determined her position to be 48°20.2'N, 123°21.8'W. This position lies approximately 11 cables (1.1 miles) east of the eastern boundary of the inbound traffic lane. MCTS and the vessel's bridge watch recorded that the vessel's position did not change appreciably until she left the anchorage at about 0100 on 26 July 1997 to proceed towards the pilot station.

At approximately 2013 the OOW saw a deep sea vessel, later identified as "ORHAN EKINCI", approaching Constance Bank. It was approximately 75° on "BUM DONG's" port side and one mile off. When the approaching vessel was some 400 m from the "BUM DONG's" she made a bold alteration of course to port. The OOW estimated the alteration to be of about 20 degrees. Having observed this, the OOW photographed the approaching vessel. From the direction of

²

All times are PDT (Coordinated Universal Time minus seven hours) unless otherwise noted.

the wake astern of the "ORHAN EKINCI", the photograph appears to show that the vessel had recently altered course to port. The OOW did not initiate action to warn the "ORHAN EKINCI" that he considered that she was too close.

About a minute later the "ORHAN EKINCI" passed very close ahead of the "BUM DONG" on a course about right angles to the latter vessel's heading. One person was seen on the "ORHAN EKINCI"'s starboard wing at that time. When the starboard quarter of the "ORHAN EKINCI" was passing the bow of the "BUM DONG", a strong vibration was felt on the "BUM DONG" by both the bridge watch and the crew in the accommodation. The OOW saw the starboard side of the "ORHAN EKINCI" rub against the bow of the "BUM DONG" and paint chips fly off at the point of contact. The OOW saw two more persons appear on the bridge wing of the "ORHAN EKINCI" at this time, and at least two more were seen on the other vessel's poop deck, above the point of contact.

Upon feeling the vibration, the master of the "BUM DONG" rushed to the wheel-house hearing on the way a thumping sound. Upon entering the wheelhouse he saw the "ORHAN EKINCI" altering course to port about 100 m on the starboard bow of the "BUM DONG".

The crew of the "BUM DONG" inspected the forecastle and found that the forward-most tip of the bow was bent inward slightly. Black and red paint chips and metal flakes, some appearing partially melted, were found in the immediate area of the damage. At 2018 the master of the "BUM DONG" called "ORHAN EKINCI" on VHF channel 11, which is monitored by MCTS, but received no response. At 2027 the master called MCTS and reported the occurrence.

The master subsequently contacted the "ORHAN EKINCI" on channel 17 which is reserved for communication with pilots. The "ORHAN EKINCI" responded but asserted that she had not collided or made physical contact with the "BUM DONG".

Damage Inspection

On 26 July, 1997, a visual inspection of the "ORHAN EKINCI" at English Bay anchorage detected a horizontal scratch mark on the vessel's shell plating on the starboard quarter and a gouge in the round bar at the corner of the transom (See photographs). The scratch mark was 3.45 m long, 5 to 8 mm wide with a depth ranging from 0 to approximately 4 mm. Both the scratch and the gouge were on the same level, 67 cm above the main deck and 10.3 m above water level. On the same day, the damaged area of the bow of the "BUM DONG" bow was measured as being 10.2 m. above the water level.

The master of the "ORHAN EKINCI" was not aware of, nor could he explain the origin of, the scratch marks on his vessel's starboard quarter. When taking over the command of the vessel two weeks earlier he and the previous master had completed the formalities of a change of command but they did not inspect the vessel or discuss damage. The master acknowledged that, when approaching Victoria pilot station on 25 July, 1997, his vessel had passed very close ahead of the "BUM DONG" but he maintained that the "ORHAN EKINCI" had not touched any vessel at the Constance Bank anchorage.

Close examination of the shell plating in vicinity of the scratch mark on the "ORHAN EKINCI" disclosed that the surface coat of the black paint was in good condition and shiny. The bottom of the scratch appeared to be

shiny and metallic without a sign of rust. There were small metal flakes sticking out of it. Several flakes were peeled off using a pocket knife and subsequently sent to the TSB engineering lab along with similar samples removed from the bow of the "BUM DONG".

The master reported that no ballast operations were performed on the "ORHAN EKINCI" between the time of arrival at Victoria pilot station and the time when the measurements were taken. However, the draft aft of the "ORHAN EKINCI" when the measurements were taken was 6.00 m while the master and the pilot reported that the deepest draft of the vessel upon arrival at Victoria pilot station was 6.3 m.

Similarly, some cargo had been worked on the "BUM DONG" when the distance from the damaged area of the bow to the water was measured.

Laboratory analysis of the metal shavings removed from the vessels determined that they were similar in composition but the analysis was unable to establish from which vessel the shavings originated.

Marine Communications and Traffic Services

Vessel traffic in the area is monitored by one MCTS regulator watching four radar screens covering adjoining but different areas. The screens are located next to each other, in the same console which is designed to enable one regulator to monitor all four. The MCTS regulator, while devoting his attention to one of the four radar screens, must leave the other three unobserved, however briefly.

The "BUM DONG" was tagged as "C867" and monitored by MCTS radar. The position in which the "BUM DONG" anchored at 1700 is corroborated by the MCTS computer record of the vessel's radar target coordinates. MCTS confirmed that the vessel anchored approximately 11 cables (1.1 miles) east of the eastern boundary of the inbound traffic lane. The computer record also shows that the position of the "C867" remained practically unchanged until the vessel weighed anchor some eight hours later and proceeded towards the pilot boarding area.

Analysis

There can be no doubt about the position of the anchored "BUM DONG". The information provided by the crew is fully supported by the data recorded and monitored by MCTS. The vessel was about 1.1 miles east of the eastern limit of the inbound traffic lane.

Although the bridge watch of the "ORHAN EKINCI" reported that the vessel passed close to the bow of the "BUM DONG" and asserted that the vessel's starboard quarter had not contacted the bow of the "BUM DONG", there is sufficient information available to indicate that the contact (and minor damage) happened:

- the shuddering felt aboard the "BUM DONG" as the "ERHAN EKINCI" passed over her anchor chain;

- the MCTS record shows that the radar echoes of both vessels merged at 2013:50. While the merging of targets does not prove contact, it indicates that the vessels were very close to each other;

- the measured height above the water of the damaged part of the bow of the "BUM DONG" and the scrape on

the starboard quarter of the “ORHAN EKINCI” was nearly identical;

- the bare steel exposed by the contact was bright. The “ORHAN EKINCI” left dry dock with a newly painted hull 13 days previously and had completed a trans-Pacific voyage without going alongside another vessel or structure. Had the scrape occurred some time before arrival, the metal exposed would have shown some signs of oxydization; it did not.

According to the principles of safe navigation the “ORHAN EKINCI” was required to give the”BUM DONG” a wide berth. It is irrelevant whether the “ORHAN EKINCI” touched the”BUM DONG” or whether she passed as much as 50m or as little as 25 m ahead of the tanker. It was considered unsafe to manoeuvre the large, deep sea, bulk carrier in such close proximity to the anchored tanker.

The shuddering felt on the “BUM DONG” was most probably due to the hull of the ORHAN EKINCI” riding over the other vessel’s anchor chain. The downward and shortening force exerted on the anchor chain was, most probably, the cause of the anchored vessel’s bow being brought into contact with the starboard quarter of the “ORHAN EKINCI”.

Most of the information provided the master and crew of the “ORHAN EKINCI” concerning the vessel’s approach to Victoria pilot station was contradicted by the same individuals when interviewed for the second time. The positions of 1928 and 2026, however, can be corroborated by information from other sources.

The information supplied at both interviews was, in the main, incompatible with the MCTS record which registered the vessel’s position about every five minutes during her approach to the pilot station. The fixes plotted by those on the bridge of the vessel on the ship’s chart purported to show that the vessel had approached the pilot station within the designated traffic lane. There is an obvious inconsistency, upon which the master declined comment, between this information and the information that the vessel had passed either 25 or 50m ahead of the “BUM DONG” because the tanker was anchored about 11 cables (1.1 nautical miles) east of the eastern limit of the traffic lane. Since the collision undoubtedly occurred at this distance from the traffic lane and given that courses steered correspond even partly to those stated to have been steered, the positions on the ship’s chart at 1948 and 2002 can not be correct. The MCTS record shows that the “ORHAN EKINCI” left the traffic lane at about 1947.

There are also inconsistencies in the vessel’s speed over the ground, upon which the master did not comment, between the information supplied by those on watch, the speed as calculated between the positions marked on the ship’s chart and the speed as calculated between interpolated positions recorded by MCTS.

Times (PDT)	Distance ship’s chart	Distance MCTS	Speed ship’s chart	Speed MCTS	Speed, other ship sources
1928-2002	7.7 n. miles	5.8 n. miles	13.6 knots	10.2 knots	+/- 12 knots
1928 -1948	4.2 n. miles	3.4 n. miles	12.6 knots	10.2 knots	+/- 11 knots
1948-2002	3.5 n. miles	2.4 n. miles	15 knots	10.3 knots	+/- 06 knots

It can be seen that when the vessel was said by the bridge watch to be reducing speed, the information on the

ship's chart shows that speed was increasing. Either the speed as calculated from the chart or the information given during the interviews is incorrect. In fact, as the vessel's speed as determined by MCTS was almost constant throughout, it appears that neither the information on speed given at interview nor the speed calculated between the ship's chart positions is correct.

Some statements by the crew of the "ORHAN EKINCI" are corroborated by the observations of the OOW of the "BUM DONG" and the plot of the MCTS record of coordinates. These allow the most probable track of the "ORHAN EKINCI" to be reconstructed.

The "ORHAN EKINCI" left the eastern boundary of the traffic lane at approximately 1947, heading 032°(T) towards Constance Bank at a speed of 10 to 11 knots. She kept the "BUM DONG" on her port side, intending to pass astern (east of) the anchored vessel.

In a position approximately two cables (400 m) south of the "BUM DONG" the "ORHAN EKINCI" altered her course approximately 30° to port to pass ahead of the "BUM DONG". It is probable that distance between the bow of the "BUM DONG" and the starboard side of "ORHAN EKINCI" was about 25 to 50m as she passed ahead. The surface current set the hull of the "ORHAN EKINCI" towards the "BUM DONG" until the two vessels made contact.

It is not known whether the bridge team was aware that the vessel had left the traffic lane. The deviation from the traffic lane when approaching the Victoria pilot station may have been due to the quality of monitoring of the vessel's position. Alternatively, the deviation may have been deliberate, it having been the intention to pass astern of the "BUM DONG". The large alteration of course to port at the last minute was ordered after MCTS asked the "ORHAN EKINCI" what its intentions were.

The bold alteration to port to pass close ahead of the anchored vessel was commenced when the "BUM DONG" was on the port bow of the "ORHAN EKINCI" at a distance of about 400m. This alteration brought the vessel unnecessarily into a close quarters situation with the "BUM DONG". There was sufficient water for the vessel to proceed on her course of 035° to the pilot station and pass astern of the "BUM DONG", albeit out of the traffic lane.

An opportunity to lessen the risk of collision was missed when the vessel's starboard midship was passing close ahead of the bow of the "BUM DONG". A prudent mariner, understanding the properties of the ship's rudder and propeller interaction, would have put the rudder 'hard-to-starboard' to move the stern away from the danger in such circumstances.

That a Bridge Resource Management (BRM) environment was not in place is evident from the sequence of events. During the approach to the pilot station the "ORHAN EKINCI" was allowed to deviate or conned in such a manner that the vessel deviated from the traffic lane.

No one in the wheel-house challenged the master when the vessel deviated from the traffic lane or when the decision was made to cross close ahead of the "BUM DONG". No one in the wheel-house, including the OOW, actively participated in the navigation of the vessel or brought the possible consequences of the master's actions to his attention.

Undoubtedly, the onus to stay within the traffic lane and navigate safely in the vicinity of other vessels was on

the bridge team of the "ORHAN EKINCI", however, the OOW of the "BUM DONG" could have tried to warn the approaching vessel using radio, visual or sound signals. All these means were available but the OOW did not use any of them.

It is possible for one MCTS regulator to monitor all four radar screens; vessels move at relatively low speeds and they usually keep within traffic lanes - especially after an initial contact with MCTS has been made and the vessel's intended course of action is communicated. Because the MCTS regulator is not able to maintain a constant watch on one radar screen, he did not notice that the "ORHAN EKINCI" had deviated from the traffic lane at 1947. Consequently he did not issue a warning to the vessel at this time, some 25 minutes before the occurrence.

Findings

- 1) The "ORHAN EKINCI" deviated from the traffic lane and approached the anchored "BUM DONG" at Constance Bank.
- 2) The vessels made physical contact and each sustained some damage.
- 3) The propulsion and steering on the "ORHAN EKINCI" was in good working order.
- 4) The surface current was setting the "ORHAN EKINCI" to the east and out of the traffic lane.
- 5) The bridge team of the "ORHAN EKINCI" navigated the vessel without due regard to the principles of ordinary seamanship.
- 6) The master allowed the vessel to approach the "BUM DONG" and maneuvered dangerously in close proximity of the anchored vessel.
- 7) The "BUM DONG" did not try to warn the approaching vessel by any of the available means.
- 8) The MCTS regulator did not observe the radar target of the "ORHAN EKINCI" exit the area of the traffic lane at 1947 and did not warn the vessel that she had done so until 2012.

Causes and Contributing Factors

The two vessels found themselves in a close quarters situation and made physical contact because the "ORHAN EKINCI" deviated from the traffic separation scheme, approached and maneuvered dangerously in close proximity to the anchored tanker. Contributing factors were the absence of a Bridge Resource Management environment aboard and that the vessel's deviation from the traffic separation scheme was not detected at an early stage by the Vancouver Marine Communications and Traffic Services Centre.

Action Taken

Following the incident, the Pacific Region MCTS Regional Procedures Coordination Committee (RPCC) decided to meet to review Standard Operating Procedures. The result of the discussions regarding CVTS operating and hand-off procedures will be brought to the attention of the Canada-US Cooperative Vessel Traffic Services Joint Coordinating Group for further action. Also, coordinated action has been discussed between the US and Canadian Coast Guards to establish procedures for mandatory compliance with traffic lanes and separation schemes in Haro Strait and the Pilot Boarding Station.

This report concludes the Transportation Safety Board's investigation into this occurrence. Consequently, the Board, consisting of Chairperson Benoît Bouchard, and members Maurice Harquail, Charles Simpson and W.A. Tadros, authorized the release of this report on 04 June 1998.