BOSPHORUS Audit

NAVIGATION ASSESSMENT (REMOTE)

VDR ANALYSIS REPORT

SHIPS' NAME	TBN
COMPANY	Tbn
ANALYSIS BY	Bosphorus Audit
AUDITOR	Capt. TBN
REPORT DATE	14th Dec 2020
NAVIGATION DATE	25th Nov 2020
LOCATION	Bosphorus Strait Passage
REPORT NUMBER	BG081401

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Contents

Introduction

The report has been presented about the received VDR data from the vessel …… which the time period is (Date and time) UTC between (Date and time) UTC. Additionally the data has been supplemented with the passage plan, documents and logbook copies etc. as per Bosphorus Audit requested criteria in order to eliminate the data gap received from the VDR and verification of the analysis. The vessel navigation operation at the report is "Bosphorus Strait Passage, anchorage operations "which consist restricted and congested area navigation and anchoring. The report has been divided core elements and the bridge team performance has been comparison against industry guidelines (BTM, BPG, VIQ, MSC circulars) , company procedures and best practices. The report is confidential between (The Company) and Bosphorus audit. The report can be used for internal process and training for the (The Company) and further assessment comparison for the Bosphorus Audit.

VDR Maker and Model

Data logged the VDR as below:

- Date and Time
- Ship's position
- Speed (SOG and LOG)
- Heading
- Bridge Audio
- Communications Audio
- Radar Data
- AIS
- Echo sounder
- Engine Order and Response
- Bridge & Engine Alarm Status
- Rudder Order and Response
- Wind Speed and Direction

Audible Communication Time Frame

Date & Time	Event
	Master informed before anchorage
	Engine manned
	Steering gear change over
	Let go port anchor
	Anchor directions
	Communication with VTS for passage time
	Anchor Aweigh
	Passage Completed
	Drop Anchor

Observed Gaps

1 – Bridge distraction policy implementation need to improve. Mobile phones has been used for personal reasons, during strait passage of duty crew communication has been heard.

2- Taking and giving con is not audible in order to recorded for VDR.

3- OOW participation to bridge team communication is limited. Most of the passage OOW was just plotted vessel position.

Radar Data Assessment

The video from radar images has been attached to the document. Furthermore, below gaps has been observed.

Observed Gaps

4 – Failure to acquire targets on radar.

5- Radar parameter is not suitable for strait passage.

6- AIS data has been used on radar in order to collusion prevention.

7- During anchorage watch the vessel position neither check from shore nor the other vessels.

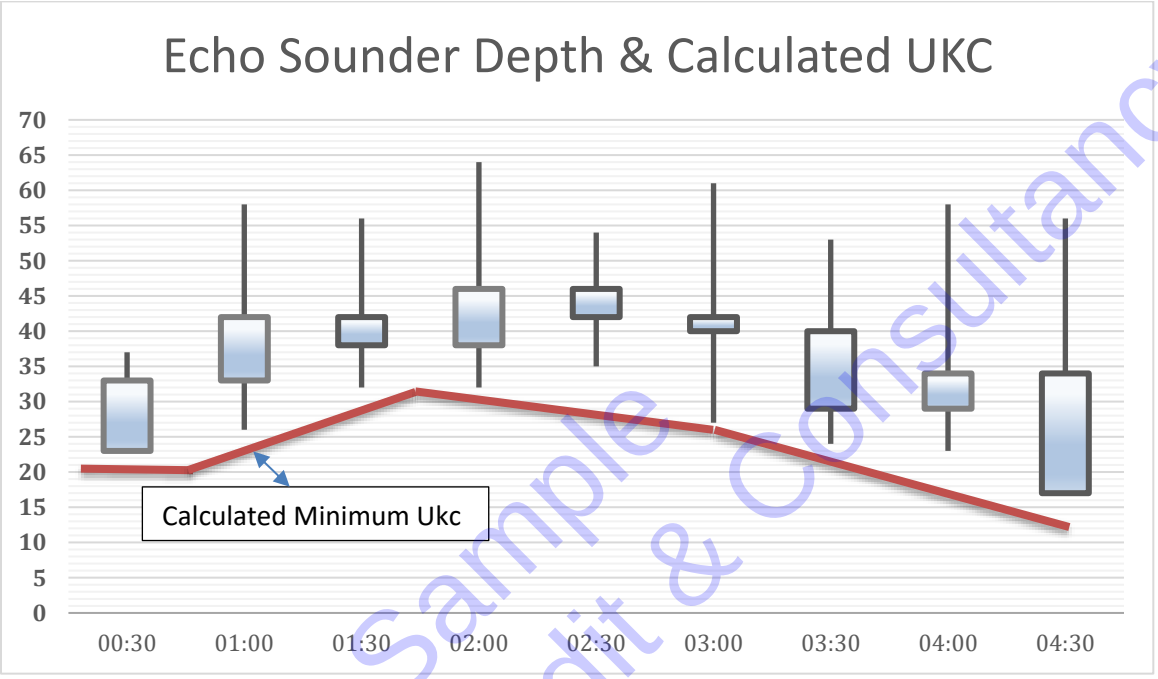
8- Radar targets are auto acquired, which cause clutter the screen and alarm fatigue to the OOW.

9- Parallel indexing is not applied on Radar even was confirmed at passage plan.

10 – Speed over ground has been used on the radar instead of Log speed.

Echo sounder

Echosounder alarm were audibly tested before anchorage. Echo sounder alarm set points has been sought properly.



Observed Gaps

No gaps has been observed. Company required UKC has been implemented properly.

Graphics

- Speed (LOG) graphics.
- Speed (SOG) graphics.
- Course graphics.

Scoring

4 = Best practice

3 = Acceptable

2 = Needs improvement

1 = Unacceptable

N/A = No applicable

Assessment Area	Scoring	Gap
Passage plan– Stage 1 – Preliminary	N/A	
Passage Plan – Stage 2 – Appraisal and risk assessment	N/A	
Passage Plan – Stage 3 – Planning	N/A	
Bridge team briefing on passage plan	N/A	
Passage plan – monitoring of passage	N/A	
Alternative passage plan	N/A	
No-go areas/abort points discussed and plotted	N/A	
Equipment tested/status verified	1	Pre-arrival & Departure test of main engine and steering gear did not carry out.
Bridge team organization- manning levels	4	Manning levels are adequate.
Effective use of bridge equipment	3	Radar parameters are not properly adjusted for strait passage.
Monitoring instruments	2	Lack of plotting targets on radar and PI not applied.
Traffic appreciation	3	
Application of Colregs	3	
Track management	4	
Communication management	4	
Anticipation-decision making	N/A	
Situational awareness	2	
Bridge team management	N/A	
Response to stress	N/A	
Delegation of duties	N/A	
Confidence	2	
Pilotage – overall	N/A	
Discussion with pilot including amendments to passage plan and mooring or tug arrangements	N/A	
Integration of pilot	N/A	
Monitoring of pilot	N/A	
Master's standing/night orders	N/A	
Relevant ship handling	N/A	

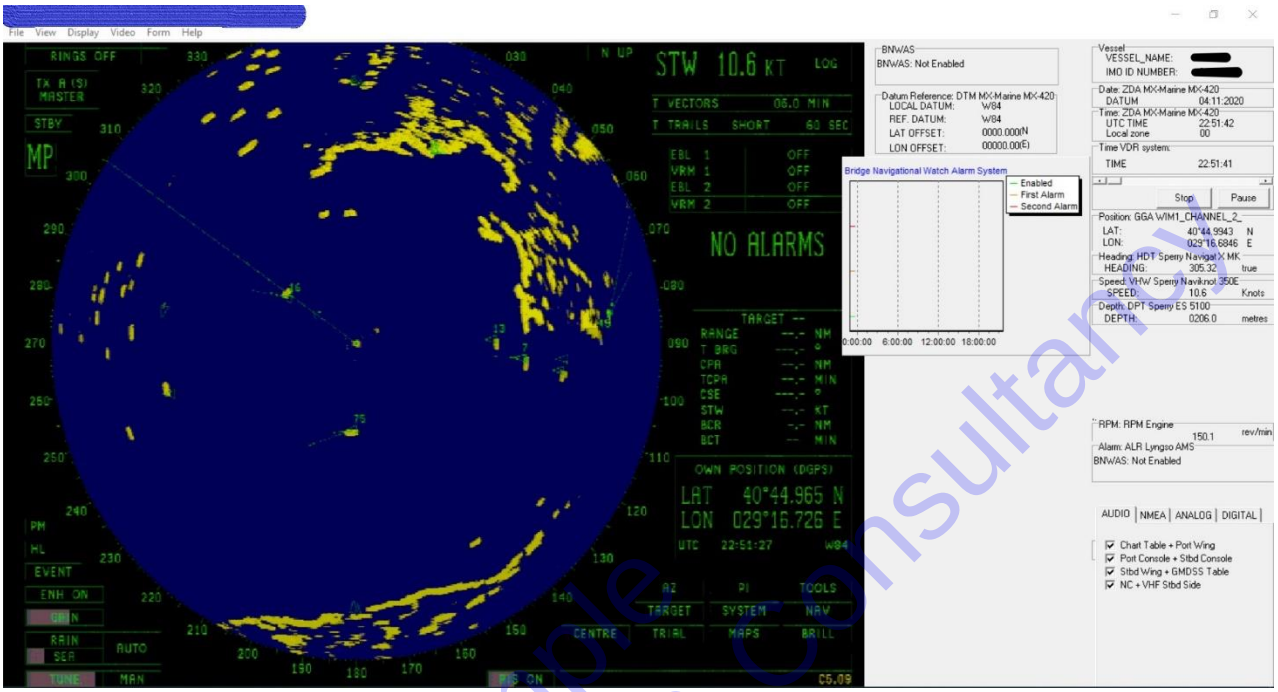
Overall navigation safety	2	
Watch handover procedure	N/A	
Familiarity with ECDIS	N/A	
Cyber-security/hygiene	N/A	
Navigation instructions/procedures/ checklists/documents on bridge	N/A	
Standard publications available	N/A	
Entries in logbooks	N/A	
Transfer of con	2	Transfer of con is not audible.
Fatigue management (hours of work and rest)	N/A	
Compass errors	N/A	
Management of navigation warnings	N/A	
Familiarity with emergency/ contingency plans	N/A	
Control of night vision	N/A	
End-of-voyage briefing	N/A	
Training	N/A	
Maintaining anchor watch	N/A	
GMDSS equipment	N/A	
Security awareness	N/A	
Accident, collusion and salvage	N/A	
Mentoring	N/A	
TOTAL SCORE	32	
Maximum score	48	
Overall score %	67%	

Gaps & Action Plan

Assessment Area	Gap	Action
Passage plan– Stage 1 – Preliminary		
Passage Plan – Stage 2 – Appraisal and risk assessment		
Passage Plan – Stage 3 – Planning		
Bridge team briefing on passage plan		
Passage plan – monitoring of passage		
Alternative passage plan		
No-go areas/abort points discussed and plotted		
Equipment tested/status verified	Pre-arrival & Departure test of main engine and steering gear did not carry out.	*Pre-arrival & departure test including steering gear test must be tested as company and Solas requirement. Further follow must be carried by Master and Company. During next navigation assessment should be confirmed.*
Bridge team organization-manning levels	Manning levels are adequate.	
Effective use of bridge equipment	Radar parameters are not properly adjusted for strait passage.	*Company should establish guidelines for radar parameter and implementation should be follow during follow up assessment.*
Monitoring instruments	Lack of plotting targets on radar and PI not applied.	*Master should ensure that the pi implementation properly applied. The pi importance must be discussed with OOW in order the cross check of the position.*
Traffic appreciation		
Application of Colregs		
Track management		
Communication management		
Anticipation-decision making		
Situational awareness		
Bridge team management		
Response to stress		
Delegation of duties		

Confidence		
Pilotage – overall		
Discussion with pilot including amendments to passage plan and mooring or tug arrangements		
Integration of pilot		
Monitoring of pilot		
Master's standing/night orders		
Relevant ship handling		
Overall navigation safety		
Watch handover procedure		
Familiarity with ECDIS		
Cyber-security/hygiene		
Navigation instructions/procedures/ checklists/documents on bridge		
Standard publications available		
Entries in logbooks		
Transfer of con	Transfer of con is not audible.	*Transfer of the con should be audible carried specially the record of the VDR. Most of the incident reports shows that, the con management is crucial and should be audible by VDR.*
Fatigue management (hours of work and rest)		
Compass errors		
Management of navigation warnings		
Familiarity with emergency/ contingency plans		
Control of night vision		
End-of-voyage briefing		
Training		
Maintaining anchor watch		
GMDSS equipment		
Security awareness		
Accident, collusion and salvage		
Mentoring		

VDR Screen Highlights



Behavioral competency of bridge team members

Master	
Pros	Cons
Monitors, cross-checks and reports changes in vessel system states.	Selects a course of action without a clear risk analysis.
Discusses contingency strategies.	Does not discuss probable causes with crewmembers.
Communicates clear expectations.	
Asks questions and observes others to confirm their understanding.	

OOW – Chief officer	
Pros	Cons
Encourages idea generation and challenges existing norms.	Is a poor role model to others in terms of personal ethics and standards, e.g. does not comply with company policies and procedures.
Consults those with specialist expertise or local knowledge when required.	Normalises risk ("This is the way it has always been done here").
Gives detailed and constructive personal feedback.	

Recommendations & Conclusion

Master navigational audits and company internal audits need to focus implementation of the company procedures. Master should encourage the officers for the proper use of navigational aids. Furthermore, bridge equipment failure drills need to carried out frequently and limitation of the equipment should be observed. Follow up VDR analysis required within 6 months with variants of the navigation operation (ie berthing, arrival, departure, anchorage, pilotage, strait passage).

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