National Transportation Safety Board

Washington, D.C. 20594
Office of Marine Safety

Interview Summary – DCA15FM035

Interview of: [redacted], 2nd Engineer
Date/Time: September 9, 2015 from 1626 to 1709
Location: On board Carnival Liberty, St Thomas USVI
Interviewed by: [redacted] — Fowler Rodriguez, [redacted] — Carnival Corp., [redacted] – NTSB IIC, [redacted] – NTSB, [redacted] – NTSB, [redacted] – USCG, [redacted] - USCG
Case: Carnival Liberty engine room fire, September 7, 2015

- 3rd contract as 2nd engineer with Carnival – has 1st engineer license (Italy) with Panama endorsement – previous had been 3rd engineer for 6 contracts
- Signed on July 25 2015
- Works on second watch 08 to 12 and 20 to 24
- Responsibilities of 2nd engineer on watch – watch leader – operator of all systems – machinery and engine spaces – proper function of machinery – find something strange; then 3rd engineer is sent to check and fixes any problem
- Sometimes does rounds in engine spaces while 3rd engineer remains in ECR – most of his time on duty is in the ECR
- Watch handover, need to come 30 minutes before to do pre round checks in the space – check all is fine and clear – then go to ECR to follow checklist instruction and do handover with off going engineer – talk about what happened with previous watch, work progress, what happened in the last 4 hours
- When asked to explain what he remembered about events leading up to and during the fire:
    - Did not make pre round check this morning – chief engineer did not authorize extra hours work
    - Started at 0800
    - 2 DG's on net – DG 3 and 4 – DG 2 was down for maintenance — DG 5 was down (since about 1 week) and 6 out of service for a long time (since he came on board)
    - DG 2 was undergoing normal inspection from PMS – manual mode
    - Ship was in port on diesel oil system
    - 1130 fire started – almost the end of the watch
    - 3rd engineer was in ECR to be ready for handover
    - At that time, alarms fuel oil leakage bank A and B so he sent the 3rd engineer to go and check
    - There was then an alarm from DG 4 and the bridge called by talkback system – all fuel and smoke detectors were activated
    - Advised to start the procedure for fire fighting

    - First thing EOW did was to put DG 1 on the net and stopped DG 4
    - The staff chief engineer was in the office and got an alarm at his desk. He came into the ECR and the first thing he did was check the Hi Fog panel – the EOW went with him – the system was running
    - 3rd engineer below realized there was a fire and he pushed the manual points to start the hi fog
    - The staff chief engineer pushed the total flooding for all aft engine room just to be sure
    - After that he also decided to push the total flooding forward as well — only a few seconds after
    - After that they decided to close the QCV's
    - The chief engineer arrived in the ECR and all engineers came to the ECR after the bridge announcement
- The EOW started DG1 from the automation system
- DG4 was stopped, it was also done from the automation system because he didn't realize there was a fire at that time — it was only after the bridge called him that he realized there was a fire
- Staff chief was first to arrive and the first thing they did was check the hi fog if it was running
- Staff chief was in the ECR before the chief because he was very close to the ECR in his office
- Both of them went to check the hi fog and it was running
- Staff Chief started the aft engine room total flooding – bridge told them all fire detectors were activated
- They activated total flooding in the forward engine room because the only engine in service was there. The WTDs were open since they were in port. 3 engines were out of service
- If you lose the DG, you would have a blackout
- EOW started DG1 and stopped DG 4 – the changeover was normal – no loss of power
- EDG was not running because DG 1 was on the net
- Firefighting checklist was followed since they started to isolate ventilation, electrical power, pumps – QCV's
- After the fire, they were in contact with the bridge all the time
- Hi fog was left running all the time – don't know why
- They decided to release CO2 – don't know why – perhaps to be more sure the fire was out
- Afterwards DG1 went into alarm and shut down – don't remember what kind of alarm – don't remember how the engine was shut down
- EOW watched monitors and monitored pump pressures etc
- Emergency duty – he is operator for all fixed firefighting systems
- All fixed systems worked properly – even the 3rd engineer said things are running because he was wet – could also see in the CCTV monitors
- When hi fog was tested, the pressure was good in the past
- Staff chief engineer engaged the full flooding – yes – we were together

- Don't remember why it DG1 was shut down
- When the fuel alarms went off with DG4, there were several more alarms that followed
- DG 5 and 6 were being serviced and DG 2 was under planned maintenance since the middle of the morning (in port that same day)
- Before arrival into port, they usually only use 2 DG on the net since it is so close between San Juan and St Thomas
- Procedures and checklists – don't remember who was using the checklist but recalls all the procedures were followed
- Was not aware if DG 4 ran all night previous to the arrival
- 2nd engineer does not do maintenance on the engines, that is the 1st engineer
- Does not know what cylinder # the fire originated at
- There were no standing orders from the chief engineer for that day
- Staff Chief is the coordinator for the drills as he is the replacement for the chief engineer
- DG 5 and 6 were out of service – DG 6 was out of service since he came on board – DG 5 was out of service for a week
- Normally in port, they need 2 DG's on the net
- DG 3 and 4 were running, DG 2 was down for maintenance — DG 1 was started and DG 4 was shut down
- There were no previous problems with DG 4
- Engine space rounds – looking for leaking FO leakages on the lines
- 3rd engineer must check the forward engine room and the oiler in the aft – because of WTD's being closed when at sea
- When around the engine — check the cam shaft, filters, for any leakage, smoke, and smell
- Rounds in engine spaces need to be done every 4 hours – 3rd engineer does this continuously – for the 2nd engineer, just before watch
- Fresh water bunkering was the only thing going on that morning
- When the fire took place, the alarms were from DG 4 and then alarms from Hi Fog – telephone calls
- When the bridge made the announcement "alpha code" everyone came to the area
- Alpha code is for fire
- Once the alpha code was made, everybody came so fast
- For familiarization, the safety engineer conducts this.

Glossary:

AC – air conditioning
CCTV – closed circuit television
CO2 – carbon dioxide
DG – diesel generator
ECR – engine control room
EOW – engineer of the watch
LO – lube oil
QCV – quick closing valve
WTD – water tight door