Australian Government
Australian Maritime Safety Authority

AMSA Mandated Practical Assessment
Marine Engine Driver Grade 2 NC

Certificate III in Maritime Operations (Marine Engine Driver Grade 2 Near Coastal)

Candidate surname:			
Candidate first name:			
Candidate signature:		Date:	
RTO name:			
RTO number:			
Vessel name(s):			

Candidate assessment result summary

The candidate has completed all components of the relevant Maritime Training Package, including this practical assessment, and has been deemed competent:

Assessor name and number:			
Assessor signature:		Date:	

Assessor comments:

Candidate instructions:

1. Observe all legislative and workplace health and safety (WHS) / occupational health and safety (OHS) requirements and comply with vessel safety management system.
2. Observe all procedures as set out in the vessel's operating documents.
3. Complete the practical tasks below using vessel documentation as required.
4. While completing the practical tasks, answer all questions, as directed by the assessor.

Assessor requirements:

Assessors of the AMPA must be approved by AMSA in accordance with Marine Order 505 and the Administrative arrangements for the approval of registered training organisations as final assessors (AMSA 132).

Vessel/assessment requirements:

The practical assessment must be carried out on board a commercial vessel with inboard diesel propulsion power of ≥150kW that is appropriate to the certificate of competency being assessed and which is fitted and equipped to a standard sufficient to allow the candidate to complete the practical assessment tasks.

Alternatively, the practical assessment may be carried out using an appropriate diesel engine (≥150kW), propulsion plant, auxiliary systems and deck machinery ashore.

Assessor instructions:

Ensure the candidate's name, RTO details and vessel name(s) are recorded on the cover page of this AMPA prior to commencing the practical assessment.

The AMPA must be completed and signed off within 12 months of the date of the first assessment. The candidate will need to be reassessed with a new AMPA form should it not be completed in that time.

This AMPA is valid for submission to AMSA for the MED 2 certificate of competency for 12 months from the date signed on the cover page.

Each practical assessment task has a code adjacent to it that specifies the conditions under which the performance and assessment of each task must be carried out. The table below contains an explanation of the meaning of each of these codes.

I	Task is to be completed by each candidate individually
G	Task may be completed as a group activity with individual assessment. The group must contain no more than 5 candidates.
V	Task must be completed on a vessel that meets the requirements above while operating in navigable waters
W	Task may be completed either in a workshop or on a vessel that meets the requirements specified above
P	Task must be completed in water (pool, or other safe water)
F	Task must be completed on a fire ground
S	Task may be completed on an approved simulator where realistic conditions are not feasible aboard a vessel (such as an absence of traffic or navigation marks)
O	Task may be completed by observation

Where no code is specified for a task this is at the discretion of the assessor.

The AMPA may be conducted throughout the training or after all training has been completed.

As each task is completed successfully the assessor must sign and date the AMPA in the appropriate column. Where a number of tasks are assessed by a single assessor on the same day these tasks may be bracketed together and signed of as a group.

Additional simulated exercises and oral questions may be used to provide further opportunity to clarify a point or for a candidate to demonstrate competence.

Once all tasks for a unit of competency have been completed successfully the assessor should complete the section below the tasks for that unit.

AMPA tasks may be signed off by different AMPA approved assessors from different RTOs. A partially completed AMPA brought to a second or subsequent RTO may be completed and the front cover page signed when all AMPA tasks have been completed, provided this occurs within 12 months of the date of the first assessment.

Once the practical tasks for all units of competency have been signed off the assessor who signs off the final unit should complete the Candidate assessment result summary on the cover page of this AMPA.

Candidate name:	

Practical assessment tasks		Assessor Initials	Date
Work effectively with others			
• identify own responsibilities in relation to the team and the organisation's requirements	**I**		
• work effectively in a group	**G**		

Assessor name and number:			
Assessor signature:		Date:	

Notes

Maintain marine internal combustion engines, propulsion plant and auxiliary systems			
• apply safety requirements throughout the work sequence including the use of personal protective equipment (PPE)	**IW**		
• complete all work to specification	**IW**		
• complete basic user maintenance of marine internal combustion engine, propulsion plant and auxiliary systems to manufacturer specifications and survey requirements, so as to prevent pollution of the marine environment	**GW**		
• complete maintenance records	**I**		
• lubricating	**IW**		
• maintain emergency equipment	**IW**		
• overhaul pumps	**IW**		
• perform breakdown maintenance in the event of failure of engine systems	**GW**		
• perform breakdown maintenance in the event of failure of auxiliary systems	**GW**		
• read and interpret manufacturer specifications and safety data sheets (SDS) / material safety data sheets (MSDS)	**I**		

Assessor name and number:			
Assessor signature:		Date:	

Notes

Candidate name:	

Practical assessment tasks		Assessor Initials	Date
Undertake basic maintenance of electrical systems			
• apply safety requirements throughout the work sequence, including the use of personal protective equipment (PPE)	**I**		
• carry out maintenance tasks, including: - battery maintenance - testing of alarm systems - testing of emergency generator - testing of power and lighting systems	**IW**		
• carry out simple maintenance of electrical systems in the event of: - blown fuses or open circuit breakers - earthing - failure of electricity generating systems - motor brake failure to release - motor failure - shorting	**IW**		
• implement safe and environmentally responsible work practices	**IW**		
• perform isolation, lock out and tag out procedures	**IW**		

Assessor name and number:			
Assessor signature:		Date:	

Notes

Complete engine room tasks			
• apply work health and safety (WHS) / occupational health and safety (OHS) practices, including hazard identification, risk assessment and risk control options	**I**		
• carry out housekeeping tasks, including: - correct disposal of waste - pumping of bilges - removal or lashing of loose items	**GV**		
• complete all work to specifications	**GV**		
• keep running and maintenance logs	**I**		
• sequencing tasks in conjunction with others involved in or affected by work plan, according to procedures	**I**		

Assessor name and number:			
Assessor signature:		Date:	

Notes

Candidate name:	

Practical assessment tasks		Assessor Initials	Date
Maintain hull out of water			
• apply work health and safety (WHS) / occupational health and safety (OHS) practices, including hazard identification, risk assessment and risk control options	**I**		
• carry out maintenance tasks, including: - examining anchors and cables - inspecting: • anodes • hull fittings • propeller, shafts and seals • rudder, rudder stock and seals • watertight and weathertight hatches	**IW**		
• plan and prepare for maintenance	**I**		
• read, interpret and comply with manufacturer instructions including all WHS/OHS requirements	**I**		
• read, interpret and comply with operating and service manuals for maintenance of vessel hull	**I**		
• read, interpret and comply with safety data sheets (SDS) / material safety data sheets (MSDS)	**I**		
• recognise faulty equipment and take appropriate action according to organisational procedures	**GW**		
• recognise hull damage and deterioration and take appropriate action according to organisational procedures	**O**		
• select and use correct tools and equipment for maintenance task	**I**		

Assessor name and number:			
Assessor signature:		Date:	

Notes

Candidate name:	

Practical assessment tasks		Assessor Initials	Date
Operate and maintain extra low and low voltage electrical systems and equipment			
• apply safety requirements throughout the work sequence including the use of personal protective equipment (PPE)	**IW**		
• carry out maintenance tasks, including: - replacing fuses - testing battery voltage and specific gravity - topping up battery electrolyte levels - testing charging system voltage output	**IW**		
• complete all work to specification	**IW**		
• communicate with other crew members	**G**		
• connect and disconnect shore power	**IW**		
• ensure correct requirements and details of basic maintenance of electrical systems and equipment are available	**I**		
• implement safe and environmentally responsible work practices in testing and maintenance activities	**IW**		
• locate, interpret and apply manufacturer specifications for electrical systems and equipment	**I**		
• operate direct current (DC) systems and conduct operator preventive maintenance according to manufacturer recommendations, regulations and vessel operating procedures to ensure safe operation	**IW**		
• operate extra low and low voltage electrical systems according to manufacturer recommendations, regulations and vessel operating procedures to ensure safe operation	**IW**		
• performing isolation, lock out and tag out procedures	**IW**		
• recognise and rectify electrical system faults and where necessary take steps to make them immediately safe, including: - battery faults - failure of alternators - failure of starter motors	**GW**		
• select and use appropriate processes, tools and equipment	**IW**		

Assessor name and number:			
Assessor signature:		Date:	

Notes

Candidate name:	

Practical assessment tasks		Assessor Initials	Date
Operate deck machinery			
• apply work health and safety (WHS) / occupational health and safety (OHS) requirements and work practices	**I**		
• communicate with other crew members	**G**		
• safely use deck machinery, including: - basic hydraulic system - capstans - electric or hydraulic winches or windlasses - lifting equipment	**IW**		
• undertake pre-operational checks, including: - checking oils, lubricants and hydraulic lines - inspection of safety guards - operation of emergency stops	**IW**		

Assessor name and number:			
Assessor signature:		Date:	

Notes

Candidate name:	

Practical assessment tasks	Assessor Initials	Date
Operate marine internal combustion engines, and propulsion and auxiliary system		
• check pressures, temperatures and revolutions during start-up and warm-up periods according to technical specifications **IW**		
• comply with vessel operating procedures and manufacturer recommendations for start-up and making available fuel, lubricants, cooling water and air **IW**		
• comply with work health and safety (WHS) / occupational health and safety (OHS) requirements and work practices **I**		
• implement safe and environmentally responsible work practices **IW**		
• manage fuel systems safely according to regulations, manufacturer instructions and vessel procedures, so as to prevent pollution of the marine environment **IW**		
• operate lubricating systems according to established procedures and so as to prevent pollution of the marine environment **IW**		
• operate main propulsion plant auxiliary systems to ensure safe operating conditions **IW**		
• operate marine internal combustion engines within technical specifications **IW**		
• operate pumping systems according to manufacturer instructions, operational procedures and regulations to ensure safety of operation and prevention of pollution of the marine environment **IW**		
• operate refrigeration system according to manufacturer instructions, operational procedures and regulations to ensure safety of operation and prevention of pollution of the marine environment **IW**		
• prepare shut-down and supervise cooling down of engine according to vessel operating procedures and manufacturer recommendations **IW**		
• undertake pre-operational and start-up checks, including: **IV** - coolant levels - pressures and temperatures - filters - fuel level - batteries and turning on isolator - oil level - starting system - sufficient power available on switchboard before closing isolator or breaker - inspecting for leaks and faults on engines, equipment, lines and connections - inspecting safety guards and shafts - operating valves as required - visual check electrical leads		

Assessor name and number:			
Assessor signature:		Date:	

Notes

Candidate name:	

Practical assessment tasks		Assessor Initials	Date
Manage fuel systems			
• comply with work health and safety (WHS) / occupational health and safety (OHS) and pollution control, legislation and policies	**I**		
• conduct refuelling completion procedures, including communications with fuel supplier and valve closure	**GV**		
• manage refuelling to ensure safety of operation and avoid pollution of marine environment	**GV**		
• measure tank levels	**IV**		
• recognise faulty equipment and take appropriate action	**IW**		
• recognise problems and hazards during refuelling and fuel transfer operations, and take appropriate action	**G**		
• select and use relevant equipment required for refuelling and fuel transfer operations	**GV**		

Assessor name and number:			
Assessor signature:		Date:	

Notes

Candidate name:	

Practical assessment tasks		Assessor Initials	Date
Operate and monitor marine internal combustion engines, propulsion plant and auxiliary system			
• comply with work health and safety (WHS) / occupational health and safety (OHS) and pollution control, legislation and policies	**I**		
• identify constructional parts of marine internal combustion engines	**IW**		
• maintain logs, including: - maintenance logs - oil record book - running logs	**I**		
• manage lubricating systems and prevent pollution of the marine environment	**IW**		
• manage cooling systems	**IW**		
• manage pumping systems and prevent pollution of the marine environment	**IW**		
• manage stowage of flammable/explosive materials and/or refrigerant gases	**G**		
• operate main propulsion plant and auxiliary systems within recommended parameters	**IW**		
• prepare vessel and machinery for sea	**IV**		
• recognise and rectify operational faults	**GW**		
• secure vessel and machinery after voyage	**IV**		
• take action in the event of malfunction or emergency	**GW**		

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Assessor signature:		Date:	

Notes

Candidate name:	

Practical assessment tasks		Assessor Initials	Date
Operate electrical system			
• adjust electrical supply to accommodate load demand	**IW**		
• apply work health and safety (WHS) / occupational health and safety (OHS) and pollution control, legislation and policies	**I**		
• connect and disconnect shore supply	**IW**		
• locate, interpret and apply manufacturer specifications for electrical systems and equipment	**I**		
• operate and monitor alternating current (AC) and direct current (DC) electrical systems according to manufacturer recommendations, regulations and vessel operating procedures to ensure safe operation	**IW**		
• operate electrical systems and equipment	**IW**		
• perform isolation, lock out and tag out procedures	**IW**		
• recognise and rectify operational faults	**IW**		

Assessor name and number:			
Assessor signature:		Date:	

Notes

Candidate name:	

Practical assessment tasks		Assessor Initials	Date
Apply basic survival skills in the event of vessel abandonment			
• collect, manage and interpret information on the use of lifesaving equipment and procedures to be followed when order to abandon vessel is given	**I**		
• communicate effectively with other personnel and passengers during simulated abandon vessel musters and emergencies	**IV**		
• determine type and extent of emergency and appropriate survival action to be taken	**IV**		
• remain afloat without a life jacket for at least 5 minutes	**IP**		
• don a lifejacket in water	**IP**		
• ensure behaviour reflects statutory requirements pertaining to lifesaving appliances	**IP**		
• swim in a lifejacket for a minimum of 50 m	**IP**		
• tow with a life jacket for a minimum of 25 m	**IP**		
• maintain a group huddle for at least 10 minutes	**GP**		
• swim in a group conga line for a minimum of 50 m	**GP**		
• hold heat escape lessening posture for at least 5 Minutes	**IP**		
• operate radio equipment, including very high frequency (VHF) or high frequency (HF) radios	**IW**		
• operate and use orange smoke flares or red handheld flares	**G**		
• operate and use life buoys	**IP**		
• operate and use lifejacket or personal flotation devices	**IP**		
• read and interpret instructions on emergency procedures, safety management systems and plans	**I**		
• recognise and interpret muster signals appropriately for indicated emergency	**IV**		

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Assessor signature:		Date:	

Notes

Candidate name:	

Practical assessment tasks		Assessor Initials	Date
Follow procedure to minimise and fight fires on board a vessel			
• apply extinguishing media to a fire, including: - water - dry chemical powder	**GF**		
• apply work health and safety (WHS) / occupational health and safety (OHS) requirements and work practices	**I**		
• communicate and work collaboratively as a member of a team in a firefighting operation	**GF**		
• correctly use vessel closure and shutdown systems	**IV**		
• identify fire hazards and risks	**G**		
• use a fire blanket to extinguish a fire	**GF**		
• use fire hose, lines (jet spray to fog stream)	**I**		

Assessor name and number:			
Assessor signature:		Date:	

Notes

Meet work health and safety requirements			
• access workplace information on safety management systems	**I**		
• apply safe manual handling techniques	**I**		
• cooperate with employer or supervisor on any action taken to comply with WHS/OHS legislation	**I**		
• demonstrate safe work practices	**I**		
• identify and respond to typical emergency situations	**IV**		
• identify isolation points for equipment and follow workplace procedures for lock out or tag out of equipment as required	**IW**		
• maintain housekeeping standards in work area	**IW**		
• select, fit and use appropriate personal protective clothing and equipment	**IW**		
• take reasonable care for own health and safety	**IW**		

Assessor name and number:			
Assessor signature:		Date:	

Notes

Candidate name:	

Practical assessment tasks		Assessor Initials	Date
Survival at sea using survival craft			
• apply appropriate handling strategies to manoeuvre survival craft	**IP**		
• board a life raft unassisted while wearing a lifejacket	**IP**		
• communicate with other crew members	**G**		
• determine type and extent of emergency	**G**		
• jump safely from a height into the water while wearing a life jacket, and according to established survival practice	**IP**		
• operate radio equipment	**IW**		
• participate in training, musters and emergency drills	**IV**		
• recognise and interpret muster signals	**IV**		
• right an inverted life raft unassisted while wearing a lifejacket according to established survival practice	**IP**		
• swim while wearing a lifejacket and float without a lifejacket according to established survival practice	**IP**		
• use a rescue quoit to assist a person to the life raft	**GP**		
• use paddles to manoeuvre survival craft	**GP**		
• use survival equipment	**GP**		

Assessor name and number:			
Assessor signature:		Date:	

Notes

Follow environmental work practices			
• apply safety and hazard control procedures when disposing of waste and garbage	**I**		
• apply work health and safety (WHS) / occupational health and safety (OHS) practices, including hazard identification, risk assessment and risk control options	**I**		
• recognise procedures and follow instructions for environmental work practices	**I**		
• report environmental hazards and risks in a timely way	**I**		

Assessor name and number:			
Assessor signature:		Date:	

Notes