

PFCC Decision Report

Please ensure all sections below are completed

Report reference number: 100-19

Classification Not protectively marked

Title of report: Replacement Engines for Marine Unit RhiB

Area of county / stakeholders affected: OPC, Transport Services

Report by : Trevor Roper, Engineering Manager

Date of report: 25th June 2019

Enquiries to: Trevor Roper

1. Purpose of the report

The Essex Police Marine Unit RhiB (Rigid Hull Inflatable Boat) requires the replacement of its two engines due to their age and deteriorating reliability.

2. Recommendations

It is proposed that the current Mercury 200 Verado engines are replaced ASAP with the latest Mercury 225XL/CXL V6 outboard motors at a cost of £30K. These engines are reported to have a lesser carbon footprint due to their fuel efficiency and will easily accelerate to over 40 knots when fully laden. Our research with different manufacturers of suitable replacements indicates that costs are all circa £30K to £35K.

3. Benefits of the proposal

Increased vessel reliability will provide more confidence and safety for both officers and operational planning to ensure Essex Police has increased visibility in key areas for the coastal community through increased patrols, cracking down on anti-social behaviour, tackling gangs and organised crime through joint operations with other forces and partners under the umbrella of Operation Kraken. Further benefits of remaining with the Mercury brand of engine are that Transport Services has invested heavily in both training and equipment since 2010 in order to be self-sufficient for the maintenance of such assets and as we have "Authorised Repairer" status with the manufacturer we also bring in

revenue from the Border Force and, soon, Kent Police for the maintenance of their Mercury Engines.

4. Background and proposal

In 2013 the engines were changed from 2 stroke to 4 stroke with the ambition that these would last for at least 3 years, achieve more operational hours and afford greater reliability.

All the above has been realised, with 1500 hours running time with over 5 years' service as opposed to the 1000 hours with 3 years' service achieved previously. It is imperative that officers have full confidence in the vessel whilst operating at sea and, though the above change has been a success, continued exposure to the elements and salt water, engine niggles are starting to cause operational downtime and expense whilst repairs are carried out.

5. Alternative options considered and rejected

Option 1: Do nothing.

Risk to life if failure occurs at sea.

Increasing revenue costs and asset downtime.

Option 2: Purchase engines from an alternative manufacturer.

Price for both Suzuki and Yamaha equivalent engines was slightly higher.

Our experience of the Yamaha engines previously used by Essex and currently used in Kent is that their longevity is far less than that of the Mercury brand and have also been less reliable.

6. Police and Crime Plan

Linked to sections:

2 - Delivery of proactive coastal policing patrols.

The coast is a rural area which is policed by a full-time crew of three and 15 Reserves including Special Constables who have made a considerable difference in the patrol of our rural communities on land and at sea.

4 - Protecting Vulnerable People (human trafficking).

Operation Kraken has been used to deter, detect and bring to justice OCGs intent on smuggling those most vulnerable in our society.

6 - Managing serious and organised crime.

Through joint working with UKBF and MCGA we have had success in using the RHIB to deter and catch OCGs working on our coast.

7 - Major events.

The RHIB helps us to patrol proactively the coast and the Thames Corridor. The land and sea based officers ensure the patrol of vulnerable sites and CNI locations depicted by the STRA for the coast

12 – Collaboration.

The UKBF, Maldon River Bailiff, RNLi and Kent Police have all been engaged to deliver MOUs which benefit the people of Essex. Joint patrols take place with the UKBF to ensure maximum coastal coverage.

7. Police operational implications

Ensures Essex Police's compliance with and ability to engage in Chief Officer Council Police Boat Codes (Revision 3). The Maritime Coastguard Agency marine guidance notice (MGN) 280 further dictates the safe use of vessels which are used up to 60 miles from a safe haven (port).

This proposal also ensures compliance with the 2018 Contest Strategy (Edition 4), specifically sections:

- 18(4) Further strengthen security and resilience across the UK's transport network and other parts of our critical national infrastructure that keep our country running and provide essential services.
- 19(1) Maintain our investment in the capabilities of the emergency services in order to deliver a coordinated and effective response to terrorist attacks.
- 19(3) Fully embed the Joint Emergency Service Interoperability Principles across the emergency services by 2020, to ensure that they can work together effectively in response to a terrorist attack.
- 181 The purpose of our Protect work is to keep the public safe by strengthening our protection against a terrorist attack in the UK or against our interests overseas, and so reduce our vulnerability. We aim to have an effective multi-layered defence to protect against an attack, reducing illicit access to the material needed for an attack including increasing the timeliness of suspicious transaction reports, whilst also protecting the UK's public spaces, transport and infrastructure that are most at risk of attack, and making full use of our powers and capabilities at the border.
- 183 The objectives of Protect are to: Detect and deal with suspected terrorists and harmful materials at the border.
- Reduce the risk to and improve the resilience of global aviation, other transport sectors and critical national infrastructure most at risk to terror attack.
- Reduce the vulnerability of crowded places, specific vulnerable groups, and high profile individuals.
- 188(2) Over the next three years, we will: Maintain the UK at the forefront of developing world leading screening and detection technologies at the border, including behavioural detection, new detection techniques, data analytics and machine learning.
- 189 The border starts overseas, including checks and interventions in advance of travel, as well as at the physical border and in country. Success over the next three years will mean that we continue to develop new capabilities and approaches to meet forecasts of increasing volumes of passengers and goods crossing the border, with a focus on prevention and data led upstream new detection technologies.
- 194 All law enforcement agencies work together to deliver the UK's border security objectives. Schedule 7 to the Terrorism Act 2000 helps protect the public by allowing specially trained police officers to stop and question and,

when necessary, detain and search individuals travelling through ports, airports, international rail stations or the border area.

41 The purpose of the questioning is to determine whether that person appears to be someone who is, or has been, involved in the commission, preparation or instigation of acts of terrorism.

- We will have in place the right measures to protect maritime ports and raise international maritime security standards to protect British ships, crew and passengers.
- 207 The Government will also address vulnerabilities in the maritime sector. Around 95% of British trade in goods by weight were moved by sea in 2016, so it is important that we also work with ports that are key export hubs to the UK, both to protect British shipping and seafarers using those ports, and to safeguard the UK economy. We will continue to ensure that the port sector implements focused, proportionate measures to prevent acts of terrorism on board ships and at UK maritime ports. The Department for Transport will continue with a programme of research into new and emerging technologies and disruptive effects to ensure that ports continue to have the right measures in place to mitigate the threat from terrorism
- 208 The Home Office and Department for Transport, working closely with cross-Government and operational partners, coordinate work to protect against a maritime terrorist attack. A range of security measures are in place to protect passengers and cargo, and we regularly exercise our tactical response to a maritime terrorist attack.
- 237 Over the next three years we will measure success by how we anticipate and build capabilities required to meet the threat, whilst ensuring that the emergency services and other responders have what they need to provide an effective response.

8. Financial implications

The investment will be £30k from the force's capital budget. There are no additional revenue consequences. Capital approval has gone through Stage 1, Stage 2, JCOG and the PFCC approval processes.

9. Legal implications

The purchase will be made using three supplier quotes supplied as part of the force's procurement rules.

10. Staffing implications

N/A

11. Equality and Diversity implications

N/A

12. Risks

- Engine failure would leave the force operationally exposed without sufficient marine capability.

If the report is not for publication, the Chief Executive will decide if and how the public can be informed of the decision.

Redaction

If the report is for publication, is redaction required:

1. Of Decision Sheet?	YES	<input checked="" type="checkbox"/>	2. Of Appendix?	YES	<input type="checkbox"/>
	NO	<input checked="" type="checkbox"/>		NO	<input type="checkbox"/>

If 'YES', please provide details of required redaction:

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Date redaction carried out:

Treasurer / Chief Executive Sign Off – for Redactions only

If redaction is required, the Treasurer or Chief Executive is to sign off that redaction has been completed.

Sign:

Print:

Chief Executive/Treasurer

Decision and Final Sign Off

I agree the recommendations to this report:

Sign: J Gardner

Print: JANE GARDNER

PFCC/Deputy PFCC

Date signed: 14 AUGUST 2019

I do not agree the recommendations to this report because:

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Sign:

Print:

PFCC/Deputy PFCC

Date signed:

