



## ROYAL MALAYSIAN NAVY ENHANCES PATROL CAPABILITIES

*KD GANAS in dry dock at Shin Yang Shipyard in Miri while being repowered with four 2,200 hp Cummins QSK50 engines.*

**Cummins power has been introduced to the Royal Malaysian Navy for the first time as the Navy upgrades its patrol capabilities in the South China Sea.**

The Royal Malaysian Navy is repowering its patrol vessels, and Cummins has been selected first up to provide the required horsepower diesel engines for the project.

The Fast Attack Craft, which are equipped with Bofors 57 mm and 40 mm guns, patrol Malaysia's territorial waters in the South China Sea, tackling threats such as illegal drug smuggling and maritime terrorism.

The first repowered vessel is the 45-metre KD BAUNG which had its MTU engines replaced with three Cummins QSK50 units, each rated at 2,200 hp. The second vessel, the 47-metre KD GANAS, is being repowered with four 2,200 hp QSK50 engines.

A further five vessels of similar class are to be repowered in the next two years, as the Royal Malaysian Navy enhances its patrolling capabilities in the South China Sea while also looking to improve the cost effectiveness of its fleet.

### **Cost benefit analysis.**

"The vessels are more than 30 years old and the cost of maintaining their original propulsion systems is very high," explains Rear Admiral Ir Mohd Shaiful Adli Chung, Chief Engineer of the Royal Malaysian Navy.

"After studying the options, we decided to repower the vessels and Cummins was selected as the engine supplier for the first two craft based on a cost benefit analysis."

Cummins Sales & Service Malaysia competed with MTU, Cat and other major engine manufacturers for the repower business, and early reports from the first repowered vessel are positive. While the aim with the KD BAUNG was to achieve 21-22 knots, a top speed of 25-26 knots has been achieved.

The QSK50 is an evolution of Cummins' long established 50-litre V16 platform, an industry benchmark in its horsepower range in the toughest applications.

It features Cummins' high-pressure modular common rail fuel injection system (MCRS) technology that contributes significantly to reduced life cycle costs through longer life to overhaul, fuel economy improvements and longer maintenance intervals.

Rear Admiral Ir Mohd Shaiful Adli Chung, who joined the Royal Malaysian Navy in 1987 and was promoted to the rank of First Admiral in 2016, is succinct in summarising the navy's key requirements for its Fast Attack Craft.



# CASE STUDY



At Shin Yang Shipyard during repower of KD GANAS, from left: Lt Amirul Faiz bin Kamaruddin from the Royal Malaysian Navy with Shin Yang project engineer Baraoh Uli and Cummins Malaysia's Meuthat Chong.



Rear Admiral Ir Mohd Shaiful Adli Chung with Cummins Malaysia's Ashvin Ratti Satya Nand.

“...Cummins was selected as the engine supplier for the first two craft based on cost benefit analysis.”

## Critical requirements.

“Parts availability and short lead time of re-supply are critical,” he states emphatically. “No defects mean no news. No news means good news!”

He says the navy has “confidence in Cummins” due to the company’s track record in defense applications and good local support.

Cummins Malaysia has carried out operational and maintenance training for Royal Malaysian Navy technicians on the QSK50 engine and also Cummins 6CTA8.3 marine genset. Each vessel has three Cummins gensets.

The Admiral emphasises that the more exposure the navy technicians get to Cummins’ engines and systems – especially on the troubleshooting side – the more familiar and confident they will become with the detailed workings of the QSK50 and 6CTA8.3 genset. Understanding any issues and being able solve them quicker is the key.

Repower of the KD BAUNG was carried out by Weldan Marine in Sandakan, Sabah, and was well executed, while the KD GANAS has been undergoing it repower – and a major refit – at Shin Yang Shipyard in Miri, Sarawak. The KD BAUNG has been in service since April 2019 while the KD GANAS was due for completion of her refit in September.

Kota Kinabalu and Sandakan in Sabah are the naval bases for the repowering vessels. ■



KD BAUNG... the first vessel repowered with Cummins QSK50 engines.



An industry benchmark in its horsepower range, the QSK50 features MCRS fuel system technology.

**HQ:**  
Cummins Sales and Service Sdn Bhd  
No. 12, Jalan Pemaju U1/15, Seksyen U1,  
Hicom Glenmarie Industrial Park,  
40150 Shah Alam, Selangor Darul Ehsan.  
Office : +6 03 5022 8888  
Fax: +6 03 5022 8838

**Sibu Branch:**  
Cummins Sales and Service Sdn Bhd  
Lot 6A, Lorong Ding Lik Kwong 39  
96000 Sibu, Sarawak, Malaysia  
Tel: +6084 311 807, 311 808, 337 050  
Fax: +6084 336 001

**Miri Branch:**  
Cummins Sales and Service Sdn Bhd  
Lot 1524, Block 3 MCLD, Piasau Industrial Estate,  
98000 Miri, Sarawak Malaysia.  
Tel: +6085 657850 Fax: +6085 657252

