Maritime Safety Queensland

Volunteer Marine Rescue Association Queensland

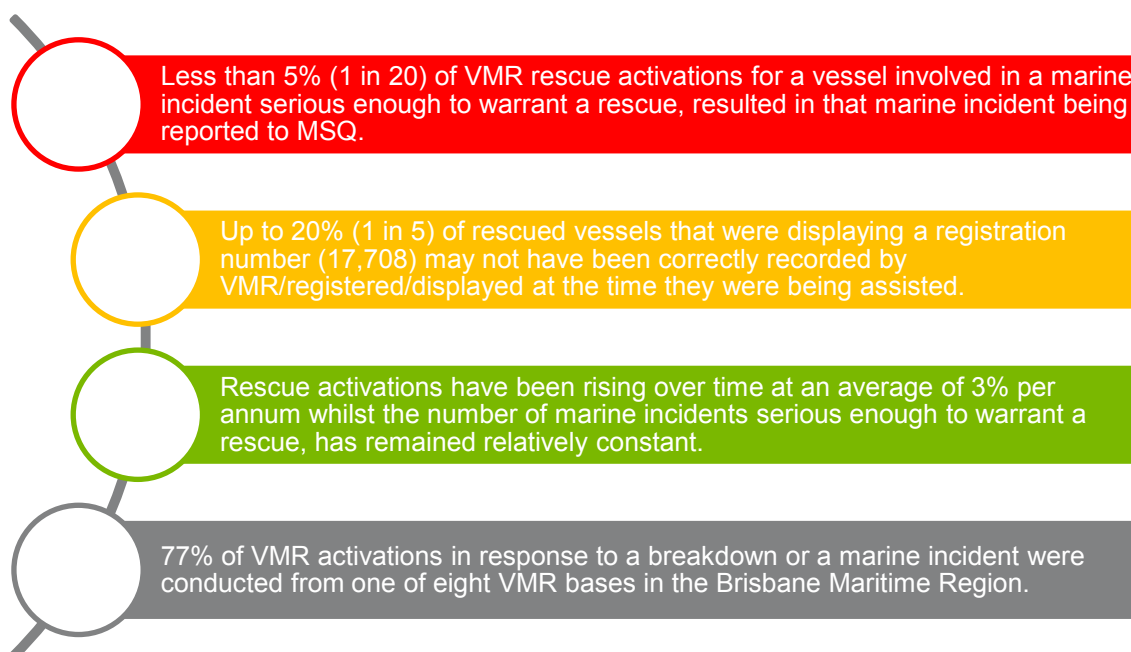**Activations 2006 to 2018**

Queensland
Government

Introduction

Volunteer Marine Rescue Association Queensland (VMR) has been kind enough to provide 74,864 rescue vessel activation records beginning in September 1999 and ending in March 2019 in response to a request from Maritime Safety Queensland (MSQ).

These records have been converted into an access database and undergone data cleansing and categorisation. The records contain the date, time, rescue vessel, squadron, purpose of the activation, a description of the aided vessel, location of the incident, and the weather conditions at the location of the incident. The database can be used to answer numerous questions including those involving time trends and seasonal effects over the medium and long term.

This note is based on an analysis of the 69,657 activations that occurred during the calendar years 2006 to 2018 inclusive as this is the most complete data set. Australian Volunteer Coast Guard Association (AVCGA) Queensland branch was also requested to provide data but has not yet responded in kind.

Observations Summary:

Less than 5% (1 in 20) of VMR rescue activations for a vessel involved in a marine incident serious enough to warrant a rescue, resulted in that marine incident being reported to MSQ.

Up to 20% (1 in 5) of rescued vessels that were displaying a registration number (17,708) may not have been correctly recorded by VMR/registered/displayed at the time they were being assisted.

Rescue activations have been rising over time at an average of 3% per annum whilst the number of marine incidents serious enough to warrant a rescue, has remained relatively constant.

77% of VMR activations in response to a breakdown or a marine incident were conducted from one of eight VMR bases in the Brisbane Maritime Region.

Observations in detail:

Marine Incident Reporting

Up to 5% (1 in 20) of VMR activations in aid of a vessel in a marine incident serious enough to warrant a rescue, results in that incident being reported to MSQ.

- Activations can be compared to records of reported marine incidents by linking the registration numbers of the vessel involved and the dates on which the incidents/activations occurred.

- VMR records 11 different reasons for a rescue vessel to be activated. Five of these reasons are in response to what are undoubtedly reportable marine incidents. Other activation reasons may also require reports, but this paper has focussed on the irrefutable reasons of sinking/sunk, drifting or grounding a vessel as well as release of flares or setting off an EPIRB.

- 5% (139 in 2700) of the activations identified by VMR as responses to marine incidents where a registration number was recorded resulted in a marine incident being reported to MSQ. In cases where the vessel had sunk, the level of reporting rose to 12% (1 in 8).

- Another 74 activations recorded by VMR as being in response to a breakdown, medical emergency, or a search resulted in a marine incident being reported to MSQ.

Registrations

20% (1 in 5) of the aided vessels that were displaying a registration number (17,708) may not have been correctly recorded by VMR/registered/displayed at the time they were being assisted.

- 26% - 18,178 of the 69,657 total activations, involved a vessel displaying a registration number. In respect of the 23,237 activations involving a breakdown or a marine incident, 76% (17,708) involved a vessel displaying a registration number.

- Queensland format registration numbers were displayed by the vessels involved in 17,006 of the 18,178 activations. The registration numbers displayed by 1679 of these vessels did not appear on the register in any month of June between 2005 and 2018. The registration numbers displayed by a further 858 vessels were not on the register at the time they were recorded by VMR.

- In addition, there were another 1172 registration numbers of various formats (including 520 ending in an "N" suggesting NSW registration) recorded by VMR.

- Together these 3709 problematic (1679+858+1172) registration numbers represent 20% or 1 in 5 of the 18,178 registration numbers recorded.

Trends

While the number of activations has been rising over time at an average of 3% per annum the number of reported marine incidents has remained relatively constant.

Figure 1 – VMR activations over time
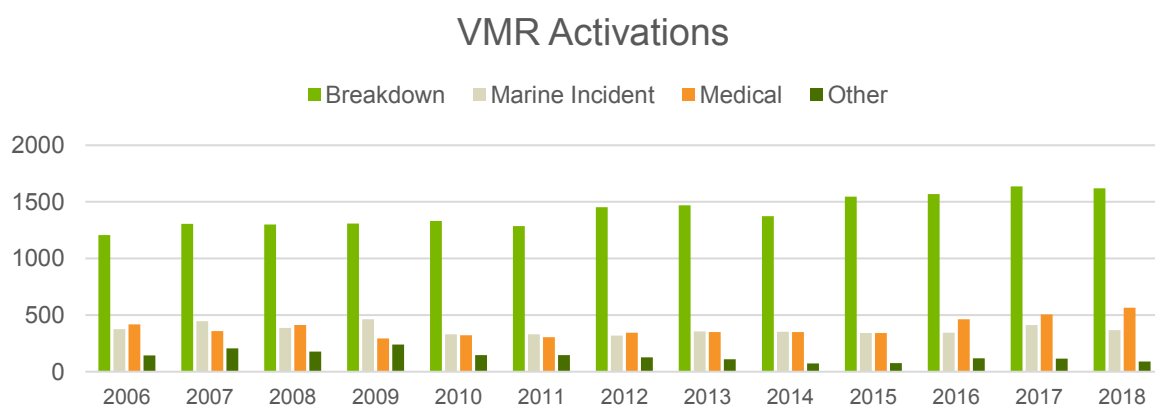
Source: VRM data

- Over the 13 years 2006 to 2018 this has been largely the result of an increase in the number of activations in response to breakdowns which have risen at a rate of 2.6 % per annum. In more recent years (2016 to 2018) the number of medical transport activations has also risen.

- The majority (77%) of activations recorded by VMR in response to a breakdown or a marine incident were conducted from one of eight bases in the Brisbane Maritime Region. 42% of these activations were deployed from their Southport base, 22% from Jacobs Well, 14% from Raby Bay and 10% from Bribie Island. Reporting from more remote Queensland bases, may not be as complete as those of the South East.

Figure 2 – Days activations occur
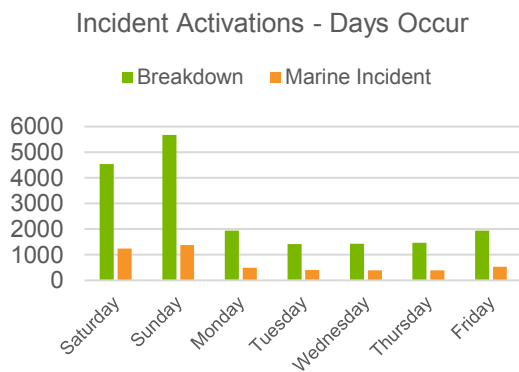
Figure 3 – Months activations occur
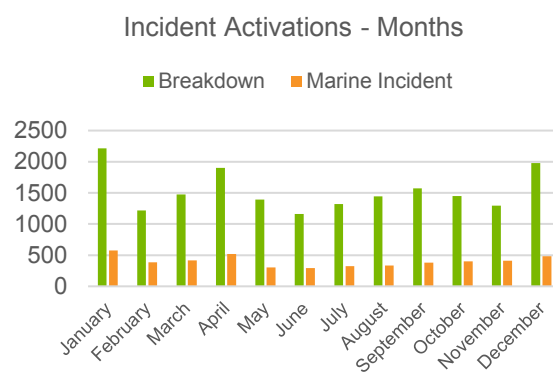
Source: VMR data

- A further 12 % of activations were conducted from bases in the Gladstone region, 7% from the Mackay region,1.4% from the Townsville region and 0.5% from the Cairns region.

- 50% of these activations occurred within 8km of the VMR base and took an average of two hours from beginning to end.

- These activations disproportionally occurred in smooth waters (64%), in calm seas (73%), in clear weather (93%) when wind speed was below 10 knots (58%). All of these favourable conditions were present in respect of 37% of these activations.

- These activations disproportionally (33%) occurred in January, April and December. 55% occurred on a Saturday or Sunday. 89% occurred between 6 am and 6 pm.

- 75% of these activations were in aid of a motorboat, 12% in aid of a sail boat and 2% in aid of a house boat

- 76% of the motorboats were less than 8 metres in length, 69% of the sail boats were between 8 metres and 15 metres, as were 70% of the houseboats assisted.
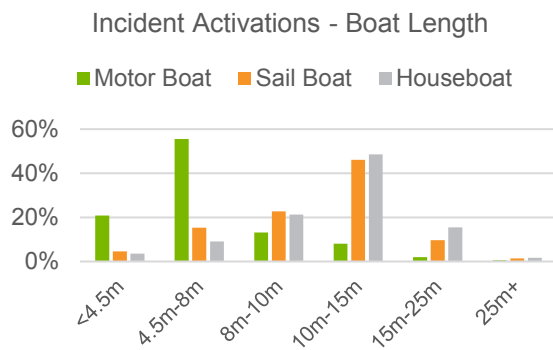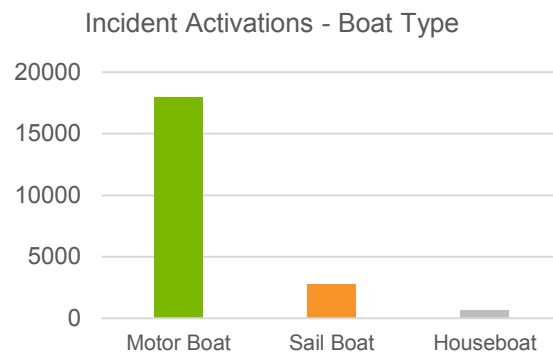
Figure 4 – Boat length

Incident Activations - Boat Length

Figure 5 – Boat type

Incident Activations - Boat Type

Source: VMR data

Data Hot Spot

Of the 3201 activations where a coordinate was provided, 14% (23,237) were in aid of a breakdown or marine incident, 43% per cent (1402) occurred within area 11 kilometres by 25 kilometres in the southern part of Moreton Bay, identifying a significant data hot spot. Most of these records come from the Jacobs Well base, which appears to be diligent in its recording of locations.

Analysis Conclusions

This brief analysis suggests that the data collected by VMR is valuable and, with MSQ working in co-operation with VMR and hopefully AVCGA, easily improved in terms of its quality. In the main, rescue activations are not often reported as marine incidents despite obviously being incidents serious enough to warrant calling for rescue. The VMR data is a sample, from the same overall population of marine events where MSQ receives its small sample of officially reported marine incidents.

This analysis along with previous statistical notices, suggests that much of the recreational marine activity in the state is conducted using small trailered motorboats launched from a very small number of boat ramps primarily in the Brisbane region.

This suggests that closer cooperation between MSQ and VMR would be extremely advantageous from an operational and enforcement perspective. By way of example, empowering VMR to advise the boater on the requirement to report a marine incident, and possibly to receive the official marine incident report as the agent/partner of MSQ, could provide a service to the boating community in terms of convenience, whilst increasing the probability of an incident being reported and improving the quality of the report received.

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