

Australian Builders Plate Targets Safer Boating

After much debate, widespread discussion and community involvement, the introduction of the Australian Builders Plate program by the National Marine Safety Committee (NMSC) is getting underway by boatbuilders across Australia.

The Australian Builders Plate for recreational boats - to be progressively introduced on a national level from 1 July this year - has provoked much discussion amongst boat builders, designers, dealers and boat owners.

Better known as the ABP, it has been developed by the National Marine Safety Committee (NMSC) after five years of consultation with industry. It provides safe boating information to boat users and as a flow on effect will encourage more boat builders to apply safety standards to the design of recreational boats.

NMSC CEO Maurene Horder said the reason the ABP has been developed is to reduce boating injuries and fatalities.

"The Regulatory Impact Statement (RIS) commissioned by the NMSC into the need for an Australian Builders Plate stated that there are 45 deaths and 109 serious injuries associated with recreational boating each year," she said.

"Fatal and serious injuries associated with recreational boating costs Australians about \$52 million each year."

She added that buoyancy was a key safety issue, particularly in relation to smaller boats.

"For example, the

National Assessment of Boating Fatalities in Australia 1992 - 1998 Report identified a relationship between vessel length and buoyancy for dinghies, other open motorboats and half cabin motorboats," she said.

"Together they made up 57% of all vessels involved in fatal incidents over the period of the study," she said.

According to the report, inadequate buoyancy was a contributing factor in 12% of fatal accidents involving vessels less than 6 metres in length compared to 6% when they were 6 metres or more.

The ABP details vital information about the capacity of boats, including the maximum number of people and load allowed, engine rating and weight and, for boats less than 6 metres, buoyancy performance.

All new recreational vessels will need to have a plate permanently fixed and readily visible in the cockpit or near the steering position. Exceptions include: amphibious vessels; canoes, kayaks, or surf skis; pedal powered boats; second hand vessels; rowing shells; sailboards or sail kites; surf row boats; hydrofoils or hovercraft; sailing vessels; submersibles; aquatic toys; and personal watercraft; and

inflatable boats in certain conditions.

The ABP is being introduced for all new recreational boats built from 1 July 2005, with all states and the Northern Territory aiming to enshrine the plate into legislation by 1 July 2006. The 12 month transition phase will allow for industry and government to work together to develop the systems needed to legislate the ABP by 1 July 2006.

Ms Horder said that industry have increased their support since the NMSC commenced consultation five years ago, and they have had a direct input into the development of the ABP standard.

"Surveys initially conducted by ourselves and the Boating Industry Association showed strong support for safety, as 93% of boat owners and 91% of boat builders supported standards for recreational boats," she said.

"Buoyancy and stability were ranked as the most important standards required and loading and engine rating as the most important items to be included on an Australian Builders Plate.

"Now we have boat manufacturers across the country already affixing plates to new boats."

Queensland based boat builder Cruise Craft Boats

introduced ABP's for their boats in January this year.

"We use the CE standard and have included basic buoyancy as a feature in all our boats, ranging from 4.75 to 6.85 metres," Director, Nathan Nichols said.

"We use two pack foam flotation through all our models."

And after months of testing, Plaka Boats have announced that they will fit an ABPs to all new boats manufactured from 1st July 2005.

According to Sales and Marketing Manager Troy Coulthard, Plaka Boats have complied with all Australian Standards required under the ABP program and, in the case of buoyancy, have used double the amount that the standard specifies.

Ms Horder stressed that a key benefit to builders is that the ABP creates a more level playing field, with all boats being built to safety standards, including imported boats.

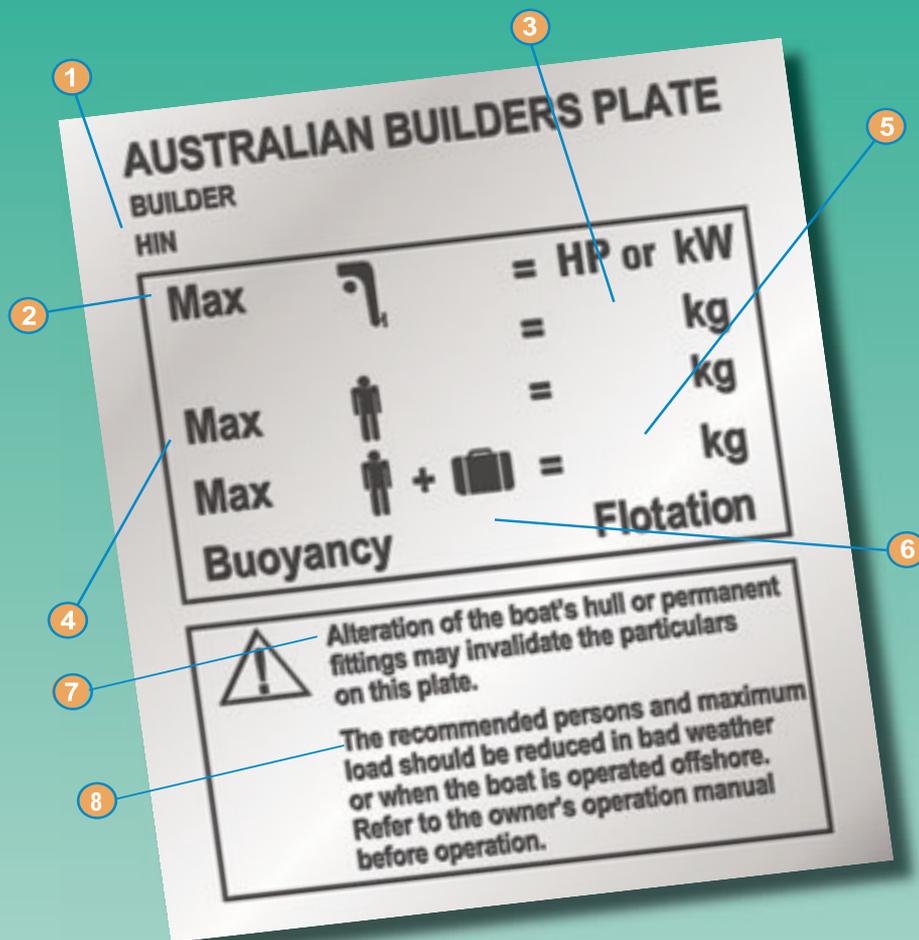
"The ABP will also make it easier for consumers to choose a boat that best suits their needs - and they will be better able to compare new boats since plates will detail standard information about each boat's capacity and flotation."

"The ABP is really a declaration by the builder or importer that the boat meets the requirements of relevant national or international standards to the extent specified within the National Standard for the Australian Builders Plate for Recreational Boats."

Two types of ABP have been developed, one for boats under 6 metres, which includes a buoyancy statement, and one for boats 6 metres or more, which does not include a buoyancy statement.

From July 2006, new

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This is a sample of an ABP plate for a boat less than 6 metres in length as of 22nd August 2005. For further details, please refer to the National Standard for the Australian Builders Plate for Recreational Boats.

- 1 Name of the person approving information on the plate, normally the builder or importer, and either the Hull Identification (HIN) or the date built
- 2 Maximum outboard engine power rating for which the boat has been designed and tested, expressed in kilowatts or horsepower
- 3 Maximum outboard engine weight for which the boat has been designed and tested, expressed in kilograms, including the weight of any auxiliary outboard that might be mounted on the transom.
- 4 Maximum number of persons on the boat, expressed in a whole number and in kilograms
- 5 Maximum load for the boat, expressed in kilograms
- 6 For boats less than 6 metres in length, there will be a buoyancy statement. Up until July 2006, the terms used may be either 'level flotation', 'basic flotation' or 'inadequate flotation'. After 1 July 2006, the term 'inadequate flotation' will no longer be permitted for use.
- 7 A warning statement that if alterations make the boat different to the builder's specifications, the particulars on the Australian Builders Plate may be invalidated.
- 8 The person approving information on the plate, normally the builder or importer, may also add a person/load capacity warning statement or other safety information.

boats less than 6 metres must have either basic or level flotation, as inadequate flotation will no longer be acceptable.

Basic buoyancy means that the boat will float in some form if swamped in calm water. This means the boat will remain afloat for occupants to hold on to or climb on to the upturned hull.

Level buoyancy means the boat will continue to float in an upright position if swamped in calm water. This will allow occupants to remain in the boat and bail the vessel to remove the water.

There is some concern in the industry as to why the ABP standard states that boats can be built to a range of standards such as: ABYC Standards and Technical Information Reports for Small Craft; AS1799; ISO 6185; ISO 8665; ISO 11592; ISO 13590 or a relevant national or international standard.

“During consultation, industry clearly stated that they wanted to be able to

have a choice over which standard they built to,” Ms Horder said

“This was because many builders already export boats built to overseas requirements and use the Standard appropriate for the market.

“However, the important thing is that the boat’s builder should consistently use the same standard when calculating information for the ABP.”

Quality control is paramount and only the builder, importer or a competent person can approve information on an ABP.

There are three main standards used to assess vessels and there has been some concern that they may have different outcomes. To quantify this, naval architect and consultant Mike Hunn has been commissioned by Marine and Safety Tasmania to compare AS 1799, ABYC standards and ISO standards using a 5.5 metre outboard powered vessel and a 7.5 metre vessel.

Mr Hunn took time out



In future, consumers should be able to determine a small boat’s safety levels before it’s purchased.

from testing to shed some light on the issue of standards.

“I think the ABP will improve safety as at the moment, builders do not have to comply with any standard,” he said.

“Although many builders do choose to follow one of the standards, there is no requirement that they do so.”

Mr Hunn went on to say that the main difference between the standards listed in the National Standard for the ABP for Recreational Boats is that the ABYC standards do not directly address intact stability.

“This means that the swamp test is really the determinant of how many passengers can be carried. This of course also depends on the number of seats provided which would realistically limit the number of people carried on a boat.”

Mr Hunn added that from his discussions with dealers, they commonly added extra batteries and bait boards to boats before they were sold, which would not usually require any change to the ABP.

However, he did caution dealers to be careful when customizing or modifying a new boat for sale and to check with the builder that the information on the boat’s ABP was still correct.

“Dealers could make modifications to the basic boat provided that the

maximum load capacity is not exceeded and that the customer is then made aware of the alterations,” he said.

“In this case it may be necessary to install a revised ABP to reflect the reduced capacity.

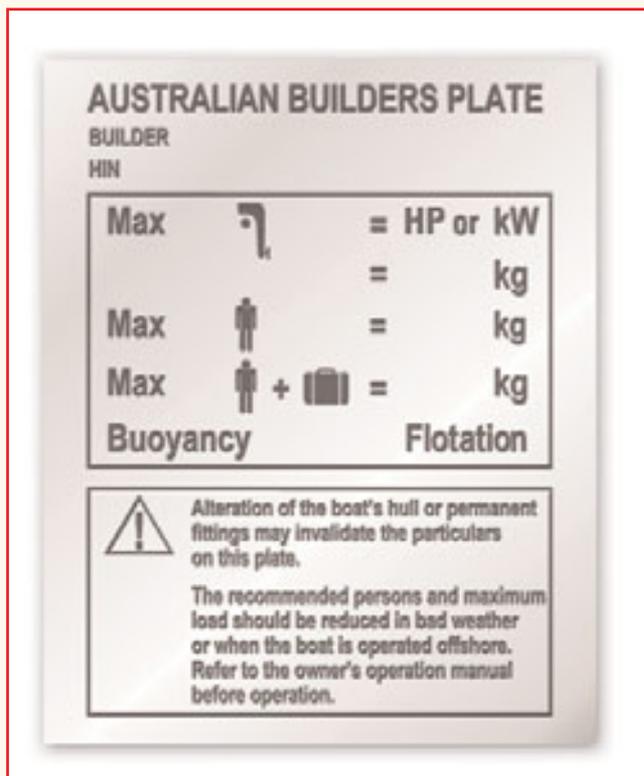
Mr Hunn said that if, for example, the dealer adds equipment to the boat weighing 150 kg, then this weight becomes part of the maximum load capacity. If it was originally 1250 kg then the customer would be able to load $(1250-150) = 1100$ kg onto the boat.”

The question of determining compliance requirements has been addressed by naval architects and manufacturers, with naval architect, Peter Edmonds in WA offering a package to industry to develop data for plates based on AS 1799.

Mr Edmonds said that compliance may not be as big an issue as some people fear.

“We aren’t doing anything really new with this ABP programme, as the ABP parameters such as maximum load capacity, maximum person capacity, maximum engine power, maximum engine mass and buoyancy information follow the USA requirements, which have been in force for many years.

“A couple of years ago, I examined a fleet of government boats for



Australian Builders Plate Level or Basic Flotation Requirement If a Boat is Swamped



Level flotation means the boat will continue to float in an upright position if swamped. This will allow you to remain in the boat and bail the vessel to remove the water.



Basic Flotation

Basic flotation means the boat will float in some form if swamped. This means the boat will remain afloat for you to hold on to or climb on to the upturned hull if the boat has capsized.

** These diagrams are illustrative only and apply in calm water.*

compliance to AS 1799 for stability and basic flotation. There were very few compliance issues raised in the 15 boat models examined.”

Mr Hunn and Mr Edmonds are part of a Technical Reference Group made up of naval architects, boat builders, large boating manufacturers, dealers, BIA and government representatives appointed by the NMSC as a result of comments received from industry during its last round of consultation.

Ms Horder said the group would advise the NMSC on the finer technical matters of the ABP Standard.

“They will also assess the outcomes of any tests/applications of standards referenced by the standard,” she said.

As a service to manufacturers, the Australian Marine Industries Federation (AMIF) provides on line facilities for ordering plates (www.amif.asn.au). Plates are supplied with customised details already printed, including buoyancy levels, maximum HP and loads.

For more information on the Australian Builders Plate for recreational boats, log onto the NMSC web site at www.nmsc.gov.au and follow the links to the ABP page.

F&B



Left: Here is an interesting photo of the Hydracraft 660 Pro Guide by GS Marine in Darwin NT undergoing swamp tests to determine the level of the flotation (and stability) of the boat when it has been swamped, and filled with water.

This was particularly interesting as the boat was weighted with ballast to simulate the designed load of the crew, motor, fuel (etc) and managed it all so easily the GS Marine team actually had to use pumps to fill it up to this level!

Needless to say, if all recreational craft in Australia could achieve this level of flotation and stability when swamped, boating consumers - especially those without much experience - would be far better off than they are now.