



New Zealand Naval Architect

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Ensuring the Dry Dock Stays Dry

By
Brendan Fagan



Calliope Dry Dock

The Calliope Dry-dock is a historic stone wall dock that has been a strategic asset for the people of New Zealand since 1888. The official opening was held on 16th February 1888. The

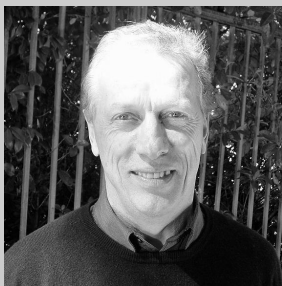
Royal Navy corvettes HMS Calliope and HMS Diamond both entered the dock, HMS Calliope breaking a ribbon stretched across the entrance. The dock was sold by the Auckland Harbour Board

in 1986 to the Ministry of Defence and officially handed over on 13th February 1987.

In August 1994 the dockyard, including dock, was leased to B a b c o c k - S k e l l e r u p . Modifications were undertaken in 1996 to accommodate the ANZAC class Frigates, which included new pumping arrangements, a new caisson and extending the depth of the rudder and sonar pits. In 2004, Calliope Dock was leased to VT Fitzroy

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A Word from the President



Hello fellow members, as an institution we rely on the support of our members to remain strong

and vibrant in order to achieve our aims. I would like to ask members to consider how they can contribute to achieving our aims and I would like to hear from any member who would be willing to sit on the council as we are currently looking for at least two new council members.

We need to build on the good work in the areas of continued professional development of members and developing and

strengthening further our links with both the academic and industrial sectors in New Zealand.

The role of the Naval Architect is as varied and wide as the marine industry; we have members working in numerous roles such, as designers, structural engineers, project managers, surveyors, production/operations management and general

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management within the marine sector. It is encouraging to see that the profession is growing in stature within New Zealand.

If it is important that we as RINA New Zealand continue to raise the profile of our profession and actively encourage people to join and contribute to the New Zealand and International Marine scene. The knowledge we gain as Naval Architects allows us to contribute effectively and in varied roles and it is important to remember that we also have a responsibility not only in our specific roles but in a wider sense. We need to contribute to increasing the profile of our institution and contributing to the general growth and well being of the marine industry that we all enjoy. Part of this contribution is the exchange of information, the mentoring and guidance of members wishing to develop their skills and progress within the institution and the industry.

Corporate membership of the Institution is a benchmark in a member's professional development that is reached by meeting the Institution's requirements for professional competence in the appropriate class of membership and I would ask member who may wish to attain this status or may be able to help identify people within the

institution and the wider industry who would be suitable candidates for development or membership.

We have the opportunity to arrange for interviews for corporate membership and chartered engineer status here in Auckland at the end of this year for suitable candidates. As a country we do suffer from the fact that we do not have member's accredited as interviewers and this is also an opportunity for corporate members to contribute and gain an accreditation which would permit local assessment of candidates.

Trevor Blakely RINA CEO will be visiting New Zealand in December and the interviews can be arranged subject to a review of the candidate's application.

Trevor's Visit is associated with the third (3rd) High Performance Yacht Design symposium planned for Dec 2008 which is a great opportunity to hear the latest international developments in this area and I would hope that members would also support this seminar and an opportunity to arrange for interviews for suitable members.

I look forward to hearing from you.

Best Regards

Brendan Fagan MRINA, C. Eng

as part of their successful dockyard management contract tender.

The dry dock is an integral part of VT Fitzroy's business and a vital capability for the marine industry in New Zealand. The maintenance of this vital capability remains with the Navy and they have as part of an alliance strategy worked with VT Fitzroy to maintain the capability. The ability to dry dock and maintain ships is crucial to New Zealand for commerce and trade and for our Navy who protects our sea lanes.

A dry dock depends upon the integrity of the dock gate. As part of the future-proofing of the dry docking capability a review of the existing dock gate was undertaken by Navy, who commissioned OPUS consulting, VT Fitzroy and local Naval Architect company MVS Ltd to develop a maintenance methodology and identify a means of future-proofing the sealing of the dock gate.

To ensure the dry-dock stayed dry the existing timber seal had to be replaced with a new rubber seal. An investigation of the various options for the maintenance and replacement of the dock gate seal led to the most cost effective and practical option, which was to capsize the gate and replace the seal with the dock afloat. The feasibility of the proposed project solution involved computerized modelling of the gate and a prediction of its behaviour during the capsize.

An inclining experiment was required to establish accurately its centre of gravity and confirm that the design prediction would provide the expected outcome. The traditional timber seal which is highly susceptible to attack by the Tereido mollusk was replaced with high density

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The dock gate during inclining—the gate's flotation tanks were ballasted to introduce a roll, and the upper gate cavity was used to stabilize the gate once it was on its side.



EPDM rubber. The project management was undertaken by VT Fitzroy and involved a wide range of the company skills including project/production management, the dock master riggers, marine fitters, plumbers, shipwrights, boilermakers and painters. The undertaking of such a unique and unusual project involved a wide range of skills within the marine sector and the execution of the project was a credit to all involved, turning a concept into reality and assuring the New Zealand marine industry with a capability and a confidence for the future that their dry dock will remain dry.

Article written by Brendan Fagan with kind permission of the RNZN and VT Fitzroy

HPYD 2008—Update

Now is the time to register for the 3rd High Performance Yacht Design conference, hosted by the University of Auckland and RINA-NZ. This key event will take place at the University on 2-4 December and has already attracted a number of the world's leading yacht designers and researchers. A total of 28 papers have been submitted by prominent authors in areas such as motions and performance prediction, structural design and aero- and hydrodynamics. We are pleased to confirm that Britt Ward from Farr Yacht Design will be delivering a keynote address to the conference. There will also be an extended design session by renowned naval architect Paul Bieker on the Tuesday evening. Paul has been the chief structural designer at BMW Oracle Racing for the last America's Cup and for the recently launched Deed of Gift trimaran, and is also

a very successful International 14 designer and builder. He will share some of his knowledge on structural design and efficient hull design processes.

The social events will commence with a cocktail reception at Bungalow8 in the Viaduct on 1st Dec. Following the sessions on Wednesday 3rd December there will be an opportunity for match racing on board SailNZ's America's Cup yachts followed by a BBQ hosted by InterCAD in conjunction with Emirates Team New Zealand. The conference will close with the formal dinner on the Thursday evening at the Royal New Zealand Yacht Squadron.

Registration is available at a reduced rate for RINA members and can be done online at www.hpyd.org.nz where a list of papers can also be found.

Government to Repeal Commissioning Rule

The Copyright (Commissioning Rule) Amendment Bill, drafted after two rounds of consultation in 2006 and 2007, has now been introduced to Parliament. If and when enacted, it will have a significant impact on professional designers and naval architects.

The amendment will reverse the current rule that copyright belongs by default to the commissioner of a design. In future (assuming the law passes into force) the architect/designer will be the first owner of any copyright in their work. The commissioner and architect/designer are still permitted to contract out of the new rule (and instead vest copyright in the commissioner) if they choose. In

the case of architects/designers engaged as employees, the law remains that copyright in works produced in the course of that employment belongs to the employer.

The law change will be of real practical significance to professional designers and naval architects when involved in pre-engagement discussions with clients. Raising the issue of the statutory commissioning rule, and explaining to clients why the architect/designer should (contrary to the rule) retain copyright, was often a tricky issue to broach with commercial clients, particularly those inexperienced in intellectual

property issues and licensing arrangements.

The ability to retain copyright ownership will address a key concern for marine designers and naval architects, that is, the ability to control future use of their works. This is particularly important in cases where a design concept created for a client is:

An extension or variant of any earlier design (as is often the case); or

A new work that the designer/architect may seek to then later use or develop further in subsequent works. Without retaining copyright in the prior work, the architect/designer may find themselves in breach of copyright in their own later works.

The change to the bargaining dynamic at the time of engagement should also allow New Zealand architects/designers to achieve fair recompense in situations where the client wishes to obtain full ownership and use rights, by receiving a premium over and above the fee for license rights only – just as their overseas counterparts do now. The international playing field is now more level for New Zealand architects/designers. The engagement process for professional architects should now become easier for all concerned.

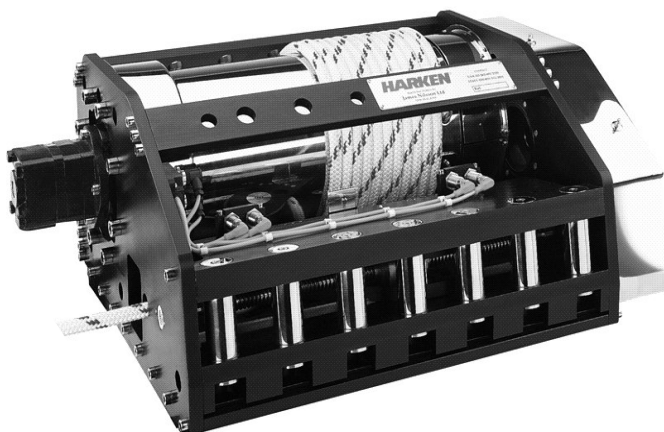
The law change brings New Zealand into line with our major trading partners (Australia, UK, USA, Canada) and the international Berne Convention. It will cause a greater proportion of New Zealand designs to remain in local ownership.

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Commercial exploitation of intellectual property rights

By
James Carnie

Introduction

There is increasing awareness of intellectual property rights, both commercially (e.g. through the recognition that innovation and design can create specific demand, influence consumer preference and generate ongoing product/brand loyalty) and legally (including the ability to secure monopoly use rights for inventions or unique works, and through registration and enforcement of statutory rights).

Owners and creators of intellectual property rights will usually seek to exploit those rights for their economic benefit. This can include immediate and ongoing benefits, such as trading or license revenues, as well as ultimate benefits (trade sale, IPO or otherwise) on exit.

Steps taken in the formation and structuring of the business will often be essential to realising both immediate and ultimate benefits: the terms of intellectual property licenses granted, for example.

This paper discusses some important considerations when commercialising intellectual property.

Identify and secure the intellectual property

The first step - and it is a critical one - is to identify the IP that will (or might) arise in the course of the venture, and to assess how that IP is to be defined and protected, used for commercial gain, and then (in most cases) transferred - whether by sale or license - for gain on exit.

Most ventures will own copyright and trade marks, ventures giving rise to inventive business solutions might well have patentable rights and specific protection is available for innovative functional designs under the Registered Designs Act.

The IP to be captured will often include valuable know-how accumulated within the venture, and proprietary information (ie. information that the venture is entitled to regard as its property, generally being secret and the product of the venture's work effort) which can include customer lists, operating manuals and the like.

Future improvements to the IP can arise from a variety of sources, including licensees/franchisees, manufacturers, contractors and employees. Business contracts should, where appropriate, secure rights to own/use these improvements.

Businesses choosing not to secure their IP at the outset risk losing any possible monopoly rights through public disclosure, and have greatly diminished ability to protect the IP in the event of challenge or misappropriation. Whilst this may not greatly alter the operating profits in the venture (at least initially), the loss of proprietary control over the IP will be felt when attempting to exit the venture, to form collaborative arrangements (including raising capital), or even in the defection of key employees or contractors.

Ownership structure

It is similarly important to get ownership and trading structures

right from day one. For example, the costs incurred in seeking to recover/preserve key IP when post-trading disputes arise with business partners (including opportunistic profiteering) will greatly exceed the set-up costs foregone. Indeed, proper structures can prevent the motivation for such disputes arising at all.

The separation of IP ownership from trading risks is highly desirable, where possible. Tax efficiency is also an important objective, particularly in the case of registered IP rights.

Commercial Strategy

The strategy for making commercial gain from IP will vary depending on the specific circumstances, including:

- The product/industry type;
- Market dynamics and entry/exit barriers;
- Capital requirements and sources;
- Risk appetite;
- Immediate/long term objectives, notably exit strategy;
- Revenue streams and costs;
- Tax implications (including transfer pricing for cross-border ventures);
- Depending on the particular venture, a strategic evaluation may lead to differing structures (e.g. licensing,

- franchising, joint venture, partnership).

In most commercial IP structures, key issues between business partners (apart from monetary commitments) will include:

- Exclusivity;
- Territory;
- Marketing (eg the duty to generate demand/turnover in the territory);
- Financial reporting and data availability (including audit rights);
- Duration and termination;
- IP registration/filing/protection obligations and costs;
- Performance obligations;
- IP warranties and indemnities (if any);
- Quality standards;
- Representations to consumers;
- Relative contributions to the business model;

Careful consideration should be given the support provided to licensees, to ensure that there are real incentives to achieve objectives set. Having the business structure and documentation well prepared is essential, but it is also vital to ensure that licensees are motivated and do not become disenfranchised or disinterested in the venture.

Branding

Much has been written about the success of design-led businesses, particularly in New Zealand where our geographic isolation

and exclusion from dominant global trade blocs increase the importance of product differentiation and reputation.

Branding can also play an important overall role in a successful IP strategy. The brand of a product/service, and controlling the appearance of that brand to end consumers, is vital in securing the overall value of the venture's IP. Marketing strap-lines often supplement trade marks in forming part of the brand.

Contracts with business partners should impose appropriate branding obligations (eg the obligation to affix prescribed labels, or to not remove or alter labels affixed already) and in so doing can effectively broadcast ownership rights and promote the brand in all markets.

Branding/labeling can include appropriate IP notices (eg. π , \ll or TM, patent or design regn no), which indicate an intention to protect the IP using relevant laws.

International Considerations

There are important differences in the way various countries treat IP, from recognition of differing rights, to varying registration regimes/requirements. Various other strategic and cross border issues (commercial and legal) will be relevant also.

For example, when licensing products into some territories, it is unlawful to exclude all warranties in favour of the licensee. Such limitations will be viewed as ineffective at law. There are, however, statutory minimums that can be adopted.

It is important to take advice from experts in the relevant territories. Partnering with local advisors that are members of international networks can assist.

Market Intelligence

A key part of a successful strategy to exploit IP is analysing the intended market(s), and adopting appropriate structures, product offerings and partner relationships to succeed.

The early identification of business partners capable of assisting, particularly those with complementary goods or services, can provide valuable local assistance and contacts.

An analysis should include assessing key market players (including prospects), barriers to entry, regulatory and political risks, and demand factors.

New Zealand Trade and Enterprise can provide some valuable assistance in appropriate markets. For international business models, NZTE provides a range of services to accelerate market entry and international business growth, including its beachhead program (see <http://www.nzte.govt.nz/>).

Intellectual Property as security (owner and licensee)

The Personal Property Securities Act (PPSA) took effect in 2002 and governs security interests in personal property.

Under the PPSA, arrangements that were not traditionally treated as security arrangements now become registerable security interests e.g. lessors of personal property, and sellers retaining title in goods until paid. The PPSA grants secured parties a number of rights, including the right to take possession of and sell off the collateral (goods) if there is a default, and sets out priority rules.

Personal property is defined in the PPSA as including chattel paper, documents of title, goods,

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intangibles, investment securities, money and negotiable instruments. Trade marks, copyright and patent rights fall within the definition of intangible, so therefore can be the subject of a security interest falling under the PPSA rules. Not only can the owner of IP grant a security interest over that in relevant circumstances (which may arise in the context of capital raising, for example), but so can licensees or third party creditors.

Generally, licences are property in which a security interest can be taken. A licence right that is transferable, albeit subject to restrictions, and that has commercial value is property for the purposes of the PPSA.

Registration is vital to protect rights where security interests arise. The PPSA also created the Personal Property Securities Register (PPSR) which is a form of electronic notice board, where persons can search and view information held here online and in real time.

For further information concerning the PPSA and PPSR, see the Clendons website

(www.clendons.co.nz) or the PPSA website (www.ppsr.govt.nz).

Summary

With proper consideration paid (particularly at the outset of a venture), the current and future prospect for making commercial gain from IP can be greatly enhanced. Although set-up costs can sometimes represent a substantial proportion of the costs involved with establishing a business at its inception, the return on that investment can be handsomely rewarded both during trading and on exit.

Disclaimer

This Background Paper by its nature cannot be comprehensive and cannot be relied on by any client as advice. This Background Paper is provided to assist clients to identify legal issues on which they should seek legal advice.

Please consult the professional staff of Clendons for advice specific to your situation.

The logo for NAVCAD is displayed in a large, bold, black, distressed font. The letters are thick and have a rough, weathered appearance, with some white speckling and irregular edges. The words "SPEED", "POWER", and "NAVCAD" are stacked vertically. A small "TM" trademark symbol is located at the bottom right of the word "NAVCAD".

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RINA NZ COUNCIL

There have been a few changes to council in the last few months. Jason Smith has taken over the role as secretary and we welcome Ian McLeod—a local Lloyds Surveyor to council.

We are short of council members, with quite a few of the longer serving members due to step down at the next AGM. You can join at any time so please consider supporting RINA NZ by giving the council a couple of hours of your time.

WE NEED YOU!

WANTED



New Council members

Can you spare a couple of hours every second month? Council members have to stand down after 5 years of service in accordance with RINA bylaws. We need some volunteers to step into their shoes/jandals. There are up to 5 vacancies, which can be filled from any grade of membership.

Nominations need to be signed by a proposer and seconded each of whom shall be a current member of the NZ Division, and countersigned by the person nominated stating that he/she consents to be nominated.

Forthcoming events

Tony Whiting of **Whiting Power Systems** will be presenting at members' evenings in October. The dates is to be confirmed and an invitation will emailed and posted out.

HPYD Evening Design Session: Tuesday 2nd December, Paul Bieker will present a design session on a wide variety of subjects including composite design, International 14 design and highly efficient hull forms.

Please watch your **Inbox** for the latest events listings. If you do not receive email please pass on your details to the division and we will ensure you hear about our talks.

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