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Rheinmetall and Hanwha shortlisted for Land 400 Phase 3

16 September 2019

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The Commonwealth has shortlisted Rheinmetall's Lynx Infantry Fighting Vehicle (IFV) and Hanwha's Redback IFV for Land 400 Phase 3.

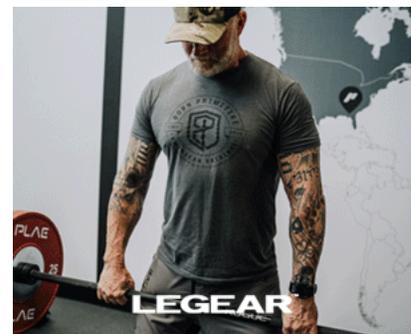
The two bids will now progress to the Risk Mitigation Activity (RMA) stage, leaving GDLS's Ajax and BAE Systems' CV90 IFVs unsuccessful.

Land 400 Phase 3 is seeking to acquire up to 450 tracked IFVs to replace the M113AS4 Armoured Personnel Carriers (APCs) which, although upgraded, have been in service since the Vietnam War. It is the largest Land investment in Australian history, worth ~\$15 billion.

The proposed vehicle mobilisation period for the RMA has been extended from six months to 12 months, which Defence says will provide the two successful tenderers with a more reasonable timeline in which to manufacture and prepare test vehicles to the configuration required.

"Concurrent activities and workshops will also be undertaken in order to clarify and refine the offers to mitigate risk to the Commonwealth (and) Stage 2 is anticipated to conclude around the end of 2021," Defence said. "The project will then undertake the Stage 3 final evaluation and down-selection of a preferred tenderer."

The Request for Tender (RfT) closed on 1 March. Defence previously expressed a preference for manned turrets on the IFV proposal, viewing unmanned turrets as 'too technologically immature' for current requirements. This view led to PSM deciding not to offer [its Puma IFV](#)



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(<https://www.australiandefence.com.au/defence/land/puma-ifv-no-bid-for-land-400-phase-3>) for the RfT, leaving the four contenders above, and now two.

The current timeline will see Land 400 Phase 3 return to Government for consideration in 2022.

ADM Comment: Opinions as to which contender would be successful were invigorated by the government's election-eve decision to revive a program to acquire self-propelled howitzers (now named Land 8116) in May, which [many believe](https://www.australiandefence.com.au/news/a-closer-look-at-land-400-phase-3-and-land-8116) (<https://www.australiandefence.com.au/news/a-closer-look-at-land-400-phase-3-and-land-8116>), will influence the final decision for Land 400 Phase 3.

Others point to Rheinmetall's success in Phase 2 as an influential factor, although Defence has [previously told ADM](https://www.australiandefence.com.au/defence/land/land-400-phase-3-bids-in-the-box) (<https://www.australiandefence.com.au/defence/land/land-400-phase-3-bids-in-the-box>), that it has 'de-linked' Phase 2 and Phase 3 'to ensure that 'best of breed' solutions be fully examined for each of the program's key platforms'.

ADM assumes that the capability/AIC matrix will have a significant role to play in the government's decision after the RMA program concludes, with both [companies](https://www.australiandefence.com.au/defence-suppliers-news/supashock-opens-new-facility-in-adelaide) (<https://www.australiandefence.com.au/defence-suppliers-news/supashock-opens-new-facility-in-adelaide>) already making [announcement](https://www.australiandefence.com.au/defence/land/hanwha-announces-land-400-phase-3-team) (<https://www.australiandefence.com.au/defence/land/hanwha-announces-land-400-phase-3-team>)s in this space.

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Joel Robertson • 2 years ago • edited
Hanwha almost guaranteed. Wouldn't be surprised to see us also buy their Biho-2 modular SPAAG/SAM system on either the Redback or Boxer chassis to provide mobile C-RAM/ VSRAD for our future combined arms brigades. I know we at least inquired about the 35mm Millennium Gun/Skyranger turret for the Boxer CRV's, but so far no word and either way the Biho-2 is on paper a much more capable and flexible system, being compatible with a variety of 30mm+ guns (Oerlikon KCA 30mm 4-chamber revolver would be my pick for its higher rate of fire) and/or missiles (RAAF-common AIM-9X2 Sidewinder, Army-common FGM-148 Javelin, Spike-LR2, AGM-114R Hellfire-II, and possibly FIM-92F Stinger) with the advantage that other than Stinger and the proposed Oerlikon KCA cannon we already use all of these weapons.
^ | v • Reply • Share

Joel Robertson • 2 years ago • edited

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Joel Robertson → Joel Robertson • 2 years ago • edited

Hanwha's K239 Chunmoo could also be a possibility instead of HIMARS, which i know is compatible with American MLRS rockets but whether or not it can accommodate ATACMS/Deep-Strike tactical ballistic missiles would be the key factor (r.e. 2016 white paper 300km MTCR range-limit artillery). Having both Hanwha and Rheinmetall factories in Australia really gives us a lot of options into the future as they are probably unmatched in that they each build such a diverse array of equipment, and although we may desire but not need such capabilities now, we may find some of those absolutely necessary in future engagements.

^ | v • Reply • Share ›



Joel Robertson → Joel Robertson • 2 years ago • edited

And quite frankly, we should already have fire-and-forget Stinger MANPADS in decent numbers as an emergency weapon for regular infantry in the back of some IFV/APC/CRV's and perhaps even PMV's. The Mujahideen's success against the Soviet's is a testament to why. No reason to throw out the upgraded RBS-70NG's either, still excellent for their originally intended role and with a shaped-charge warhead has at least some secondary anti-light armour capability. In other words, if RBS-70NG still retains some advantages over other MANPADS systems including the late-model Stinger, then why not retain the small numbers we have and the 25+ years of experience we've had operating it.

^ | v • Reply • Share ›



Greg Chalik → Joel Robertson • 2 years ago

Joel, do you understand that systems engineering is the LAST consideration in the requirements process? Foremost is STRATEGY, followed by operational reach and tactical doctrine.

^ | v • Reply • Share ›



Joel Robertson → Greg Chalik • 2 years ago

What point are you trying to make exactly?

^ | v • Reply • Share ›



jimbob → Joel Robertson • 2 years ago

haha, is this sarcasm? The redback is only a stub, the Lynx will win for sure. Even if the Redback is slightly better (which trials will clearly show it is not), Rheinmetall can offer WAAAAY more (Jobs). Its like the US cloud competition where many got invited, but everyone knew only Amazon and Microsoft were in the running. Lynx will win, easily.

^ | v • Reply • Share ›



Joel Robertson → jimbob • 2 years ago • edited

I used to think that as well. But with the announcement that we're setting up a Hanwha factory in Geelong to build just 30 K9 Howitzers which share a common engine and transmission with the Redback, not to mention greater Australian industry content with the EOS T2000 turret, it's plain as day to see the Redback will win.

It makes no sense otherwise to set up a factory to build 45 vehicles to then just close it down. Rheinmetall already have a lot on their plate as is building the 200+ Boxers and 2500+ HX2 series trucks.

^ | v • Reply • Share ›



Greg Chalik → Joel Robertson • 2 years ago

This discussion is military techno-porn. It is not a genuine discussion of capability needs that will defend Australia in future because it lacks strategic and operational contexts.

^ | v • Reply • Share ›



david stannard → jimbob • 2 years ago

It's hard to tell, Rheinmetall already has more than enough work on its hands with not only providing the Boxers but also the Land 121 trucks, there would be more than enough work to keep their MILVCOE busy for decades. I would not write off the

K31 so easily, there were many people including myself that derided the K9 Thunder all through the assumption of pedigree that the Pzh 2000 would be the superior vehicle, the K9 proved all of the pundits wrong on so many levels. The K31 does have one substantial leg over the KF41 in that the EOS T2000 turret is partly developed by EOS which implies a higher level of local content, both vehicles will create employment opportunities but the inclusion of the EOS built turret will be more supportive of Australian industry content.

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Joel Robertson → jimbob • 2 years ago

Lynx has a conventional RHA steel shell whereas the Redback's shell itself is of a composite more akin to a Main Battle Tank. In the K31 parent design it is said to be comprised of aluminium-oxide ceramic tiles embedded in a lightweight fibreglass matrix that is sandwiched between layers of an aircraft-armour grade aluminium alloy, purportedly 20% lighter for the same or superior levels of protection as conventional RHA. The significantly increased mass of the Redback in comparison might suggest that we are using Bisalloy structural and armour steel in place of the aluminium-alloy used on the K31, which would only further increase levels of protection to perhaps well above STANAG-4569 level 6.

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Greg Chalik → jimbob • 2 years ago

Countries are not defended with jobs, but military capabilities.

^ | v • Reply • Share >



Johnno → Greg Chalik • 2 years ago

The military likes think so. In truth military capability does not exist without the economy to support it.

^ | v • Reply • Share >



Greg Chalik → Joel Robertson • 2 years ago • edited

Australia is a maritime nation, not continental. It must be capable of projecting strategic force in the littorals. System engineering must answer this and produce solutions led by appropriate doctrine. This doesn't exist.

^ | v • Reply • Share >



sky vanilla → Joel Robertson • 2 years ago

Thanks much for your valuable opinion

^ | v • Reply • Share >



Greg Chalik • 2 years ago

Proof again ahtat the Australian Army has no clue about warfare. Neither company can deliver a combat vehicle that is appropriate to ADF's future capability needs. Neither can offer a design that is appropriate, effcent to deploy or effective in combat by a small force such as the Army. In fact all designs by these companies are obsolete. Shee'll be right mate....

1 ^ | v 1 • Reply • Share >



Joel Robertson → Greg Chalik • 2 years ago

Care to provide an alternative or elaborate how they're 'obsolete'?

^ | v • Reply • Share >



This comment was deleted.

Avatar



Greg Chalik → Guest • 2 years ago

See above. I don't know you, and not going to discuss alternatives in public forum. It seems to me I have said enough and Tony has read this and knows L400 project is in gross error.

^ | v • Reply • Share >



Greg Chalik → Joel Robertson • 2 years ago

They are obsolete because not designed for maritime armies. Cannot

They are obsolete because not designed for maritime armies. Cannot be deployed into combat due to A2/AD. There is a strategic-operational choke point of operational lift/reach and disembark. This currently cannot be done due to evolution of anti-ship missile technology. So everything not designed to breach/negate A2/AD in the littoral is obsolete.

^ | v • Reply • Share >



Joel Robertson → Greg Chalik • 2 years ago

But that has nothing to do with the Army or these vehicles, that's a problem for the Navy and if any A2/AD threats haven't been taken out by air strike or special forces prior then amphibious ops are simply out of the question.

^ | v • Reply • Share >



Greg Chalik → Joel Robertson • 2 years ago • edited

What does the RAN have to do with the Maritime Strategy? Maritime Strategy is not same as naval strategy. RAN has virtually no Maritime capabilities, so it may as well be the Army since it is...or ought to be, the core maritime service.

^ | v • Reply • Share >



Joel Robertson → Greg Chalik • 2 years ago

Say that again.....but slowly.

1 ^ | v • Reply • Share >



Greg Chalik → Joel Robertson • 2 years ago

It seems many people do not understand that "maritime" is not "naval". Naval means warfare employing capital ship that until 1850s were the ships of the line, and thereafter 'fleet' armoured surface combatants. Their role was to defeat enemy fleets. Maritime had always referred to trade, i.e. the shipping lanes used by merchant vessels, minimally armed. Maritime trade essentially hugs the coasts, the littoral. Protection of maritime trade had always been the job of smaller vessels, not even frigates because frigates were originally used as fleet intelligence gathering. Much of Australia's Economy is dependent on maritime trade, which so happens to transit Indonesian and PNG waters, including internal water spaces that conventionally are regarded international, but since 1980s claimed as territorial by Jakarta where lately Indonesia is being referred to as an 'archipelagic continent'. Protection of maritime trade would require a large number of long endurance vessels that can quickly secure many merchant ships, or repel many assailants across thousands of NMs of shipping lanes. RAN

[see more](#)

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Joel Robertson → Greg Chalik • 2 years ago

So let me get this straight, just so we're all on the same page. The Lynx and Redback - top-of-the-line IFV's by any measure, that are perfectly deployable by current means in any sense of the word, are 'obsolete' in your books because they can't swim across oceans, protect 'maritime' trade routes and take out coastal anti-ship missile batteries by themselves? The vehicle you suggest does not exist, nor could it ever exist.

^ | v • Reply • Share >



Greg Chalik → Joel Robertson • 2 years ago • edited

I don't know who you are Joel, and what you do for a living, so I'm not going to make assumptions. There are three kinds of military strategies, those of land-locked countries, those that are mixed maritime/continental, and those that are maritime. The vast majority of AFVs are designed for either the first or second type of strategy, overwhelmingly defined by the land geography and topographies. Design of AFVs for maritime nations, defined by HYDROGRAPHY, had never been seriously undertaken and the LVTP-7 was a "10-year interim" design in 1969, but the follow-on design never happened because of the cuts in post-

Vietnam funding. USA is the only country with both a need and a capability to manufacture such a vehicle, but the mental process by which such a design would be produced never happened in the USMC. The evidence to this is the EFV program that failed dismally due to trying to satisfy three incompatible requirements while not understanding the ultimate aim of the capability. You are right in that such a design does not exist, but you are wrong in that such a design cannot be

[see more](#)

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Greg Chalik → Guest • 2 years ago • edited

The document is online. Try using the keyboard. Australia has NOT fought in a continental war since 1945. The Army has ALWAYS gone to war in ships, and fought predominantly in littoral geographies, Afghanistan excepted. However, that is not the issue. The Commonwealth Constitution prioritises defence of the nation over fulfilment of treaty obligations to United States. Defence of Australia cannot be accomplished by defensive land tactics, operations or strategy that stops at the water's edge. No nation has assured security through defense alone. A force structure design that seeks this is blind to 6000 years of military history.

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DJAC → Greg Chalik • 2 years ago

Discussion of land combat vehicles for maritime and 'non-maritime' operations and strategy should focus firstly on cavalry vehicles such as were sought in Land 400 Phase 2. That Phase 2 requirement for highly mobile surface reconnaissance could have been fairly well satisfied by the amphibious 25-29 tonne SuperAV 8x8 APC. But the SuperAV was beaten into second place by the non-amphibious 33-39 tonne Boxer 8x8 APC. At that weight the Boxer is almost a wheeled HIFV and rival to its tracked stablemates Puma and Lynx. In most littoral and especially in dense rainfall regions and seasons a go-anywhere amphibian - preferably small like the 14 tonne ASLAV 8x8 - would be more appropriate than anything as heavy and large as Boxer and the similar sized SuperAV. However Army seems to have switched away from ASLAV supported by mortars to a more muscular and heavy form of reconnaissance such as employed by militaries which favour mass and attrition tactics based on IFVs supported

[see more](#)

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Greg Chalik → DJAC • 2 years ago • edited

Sorry, don't know who you are, but force structure design is not based on single combat arm requirements. Moreover, what does 'cavalry' do in littoral warfare? The entire brigade force structure needs to be addressed as one since a brigade (modern) is the smallest operational reach formation replacing division. In that context it seems to me the small Australian Army can only be served by a chassis that fits requirements of all arms and combat support services. That chassis doesn't exist. I'll go further to say that in fact *all* brigade elements should be mounted in the same way as Cavalry because that is their doctrine. This is not realised by the Army who think the doctrine is still Mechanised Infantry. Armies learn in two ways. One of them is defeat.

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Greg Chalik → DJAC • 2 years ago

I'm just curious. What impact the 50 'amphibians' are expected

to have strategically?

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david stannard → Greg Chalik • 2 years ago • edited

Greg a fleet of 50 amphibious vehicles is a substantial amount when compared to the overall fleet of 450 vehicles, yes it may only be 11% of the fleet but when you look at how many APC/IFV's there are it would constitute between 15% to 20% of those vehicles. As you would be aware those vehicles would be used to land an expeditionary force for the initial phase of the landing, after that the more regular units would be brought in to take the fight further inland. You only have to look at doctrine used by the Soviet Naval Infantry in the 70's through to the 90's where PT 76's, BTR 50's, BTR 60's and MT-LB's are used in the initial phases. When they had secured the beach head heavier vehicles such as T 62's and T 72's as well as SPG's and other artillery assets were brought in, the fact is this doctrine is still in use to this day. Also when you look at it what assets do we have that would enable us to land a larger force, the current number of vessels we have are not adequate to be conceived as an Amphibious Taskforce, even if all used together.

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Greg Chalik → david stannard • 2 years ago

And what happened after the 90s?

BTRs/MT-LBs were made for crossing rivers. USSR's naval infantry were never strategic in design. The service was only resurrected in the 1960s as fleet brigades. Tactical.

David, you answer your own questions.

There is no lift capacity for even a fully mounted all-arms brigade, never mind 1st Division.

And, "expeditionary" means expeditious, fast, not a long way away. LHDs are anything but fast.

The Army needs a complete rewrite of its approach to being a strategic service. But this is not a herculean and unaffordable task some may think.

Much of the intent for this already exists, and most of the corps are practically primed for this transformation.

As is often the case, its now just about leadership.

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Counterpoint → Greg Chalik • 2 years ago

It would be great to understand your view on "a combat vehicle that is appropriate to ADF's future capability needs". What key system needs in your view are appropriate? I suspect I understand where you're coming from with "efficient to deploy", but struggle to understand how the systems down selected will not be "effective in combat by a small force such as Army". In your view, what are the attributes of such a system? What are the combat scenarios? How are the IFV contenders not envisaged to be effective in combat given their inherent levels of firepower, protection, combat mobility and network connectivity?

1 ^ | v • Reply • Share ›



Greg Chalik → Counterpoint • 2 years ago

"inherent levels of firepower, protection, combat mobility and network connectivity" are useless if the force cannot be deployed into combat, or force structure is inadequate to the scale of the future challenge. The thinking in IFV design has to start with the strategic considerations, where and when and how the force will deploy. The Army says it doesn't know so preparing for every eventuality, but I know, and that spectrum is very narrow, and outside the capability spectrum the European designs were required to fit. That is Australia is a maritime nation and its strategy demands maritime projection of force. That means amphibious. moreover, not just 'amphibious' but having

strategic scale that can leverage operational reach of the entire 1st Division fully mounted in AFVs, all arms. L400P3 down select is impossible in this because no such design exists. Ask the USMC. For a change Australia MUST manufacture own domestic design that fits the need (appropriateness). This design, if led by doctrine, is actually more elegant than anything from Europe. "efficient to deploy" means not relying on embark/disembark facilities (freedom of action), but can self deploy anywhere. "effectiveness in combat" means a small force can

[see more](#)

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Greg Chalik → Counterpoint • 2 years ago

I gather you understand now Tony?

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Counterpoint → Greg Chalik • 2 years ago

Tony? Sorry Greg but that was an incorrect assumption.

I think I understand your line of argument, and as suggested previously, I'm largely aligned with some of your assumptions. But not all. Maybe you could add further value to this conversation.

Are you 100% confident that the Army's decision to acquire an IFV was not a result of strategic considerations? How do you know this? Are you suggesting the Army ignored all strategic requirements or just under valued support to amphibious operations in Australia's littoral?

Maybe Army does know what threat they're preparing for but are not willing to make public comment. Your work is acknowledged on Army's own public website, so I assume this has shaped your position. I think I largely agree with you. Where I differ with you is that the need to fight and win at home should remain fundamental aspect of Defence strategy - love to

[see more](#)

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Greg Chalik → Counterpoint • 2 years ago

Given the BOXER choice, I am confident there was no strategic input into the consideration.

Offensive amphibious operations in the littoral are not an option. Current capability planning and recent selection of tenderers show that these are not considered.

There is no option but to build domestically. I have no way to reach high enough in USA, and I failed to impress a LTG because 18 pages is not enough to unhinge the hold primes have on US Army.

"the need to fight and win at home" is not going to present itself. If it did, it would mean the RAN & RAAF no longer exist and USA is incapable of offering support. Such a 'fight' would be a futile waste of lives.

My position is NOT available in public. There is a very limited number of people that are aware of it, with only one serving

[see more](#)

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Joel Robertson → Greg Chalik • 2 years ago

So now the Abrams MBT was the 'wrong choice' as well, even though it has proved itself overwhelmingly effective for the role it was intended, particularly in the first Gulf War. The USMC's stillborn expeditionary fighting vehicle was cancelled once it became clear that in the future marines would either land unopposed or it would take a major effort using standoff weapons to take out coastal ASHM batteries so that LHD/LPD/LSD's could get close enough to the coast to even

launch the EFV's in the first place, in either scenario the EFV was overkill. Knowing this, how can you still be so adamant that Australia should start from scratch with an indigenous clean sheet design when we have zero experience designing large armoured vehicles - yet alone something as ambitious as you're suggesting, on a budget 94.4% smaller than the Americans, for the least important branch of our armed forces.

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Greg Chalik → Joel Robertson • 2 years ago

What role was ABRAMS designed for? Not for overrunning dug-in conscript Iraqis that had been prepped by airforces?

EFV was stillborn? At a cost of \$3.5bn?!

You don't understand amphibious warfare, and neither does the USMC because it had never carried out an amphibious landing. That is why the EFV failed. That, and failure of doctrinal design, or rather failure to ATTEMPT doctrinal redesign in the face of changing nature of warfare.

In the end though the EFV was too expensive and too heavy. It would be coming ashore on fumes

Did I say "Australia should start from scratch with an indigenous clean sheet design"?

Firstly, its the people that had never run a marathon that tend to do better because they don't know when to quit.

[see more](#)

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Greg Chalik → Guest • 2 years ago

Actually, I'm more than 4 steps ahead.

Since watching L400 PMO from 2003 I note that the teams there changed several times.

My take is that officers assigned to the PMO were assigned for various reasons, not exclusively because they were the most experienced, most educated and highest ranking.

What I'm saying is that Australia's future threat environment is DIFFERENT to anything that AFVs were designed for since 1944.

Ergo it would require a DIFFERENT approach to designs of strategy, operational reach, tactical doctrine and systems engineering.

I don't see anything different about the Australian Army's approach to these challenges. In fact, the challenges were not

[see more](#)

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david stannard → Greg Chalik • 2 years ago • edited

Greg what I would really like to see is the type of vehicle that you are proposing, what does it look like what's its capabilities, size, armament, range, crew, price and whether it can be built and maintained here. We need vehicles that are suitable for our operational needs be it own home turf or deployed overseas, we also need vehicles that are able to dovetail in with those of our partner nations when it comes to being out in the field.

One point that does concern me is that you are trying to change the nature of the ADF to a primarily offensive force. I am all for a well funded and equipped armed forces that is designed for the defence of our nation, but an armed force that relies on invasion

defence of our nation, but an armed force that relies on invasion as a primary form of defence really goes against the grain. I would like to see some expansion in our amphibious capabilities to where we could land a credible force in an offensive operation if it was required, but I don't want to see our armed forces being principally structured in this fashion. I would also like to see the Army equipped with some vessels akin to CB90's, Watercat M12's and up armoured RIB's that could be used for Brown Water operations. That said I don't see the point of the Army owning Blue Water assets and neither does the Army, that's the reason why they divested themselves of larger vessels and transferred the control of the LCH's to the RAN. Even when it comes to Brown Water assets are we making good use of the Defence Budget by investing in items that will more than likely have zero need or use, or should we spend it on the more critical needs of the services.

^ | v • Reply • Share >



Greg Chalik → david stannard • 2 years ago

Who are you?

I'm supposed to just offload design for vehicles intended to protect Australia for the next two generations in a public forum? Other partner nations have no capabilities to dovetail with. If having offensive capabilities goes against the grain for you, then you are not a carpenter. Show me one nation that assured her independence by defensive capabilities alone. Right between Blue Waters (naval) and Brown Waters (riverine craft) there are the Green Waters (the littoral) The RAN can have LHDs and LSD because they are useless in Green Waters. They will do well as C3I/ASW platforms. Choules was a torpedo man so it would be prosaic to have a submarine support ship named after him, right? Critical need is in the Green Waters. It is quite pointless in having a Defence Force that cannot go anywhere unless there is a nice invitation to a functioning port facility. Armies exist to 'gate crash parties'. There is no more critical need than defence of the nation

^ | v • Reply • Share >



david stannard → Greg Chalik • 2 years ago • edited

Okay Greg, if these vehicles that you have purportedly designed are for the defence of the nation over the next two generations, why aren't they in development and why is the ADF investing in the systems that they are when they could be investing in this wonder vehicle of yours. Currently there is no nation on this earth that produces cold fusion powered hover tanks with unlimited range that can travel at hypersonic speed and deal with State 6 Seas, yet at the same time be able to carry and employ a platoon of dismounts in a highly built up urban environment.

At the end of the day we are all Armchair Strategists here who have spent a number of decades reading about the many aspects of warfare, some may have served in the ADF whilst others such as myself have not served but have relatives that had. We can all make our own reasonably educated opinions as to the current and future pathways, but we are not employed at Russell Hill. Will our opinions get recognised by those who matter? probably not, opinions are like farts, everyone expresses one and generally likes their own, but when it comes from someone else it might be a bit on the nose and not to their liking.

^ | v • Reply • Share >



Greg Chalik → david stannard • 2 years ago

Yes David, good points. However, the questions need to be asked from Defence, and the Army, not me. I am very available to explain myself, and L400 PMO know where to find me.

Actually, speeds are relative, and part of the simplicity of my design solutions noting that FFV failed precisely because of the

design solutions noting that ERV failed precisely because of the demand for tactical high speed in water and large volume-related weight due to unreasonable number of occupants.

When I say that solutions are available, I am not speaking as an armchair strategist. However, I note that Army officers are also armchair strategists. They read same books, but fewer because they had spent formative lower rank years managing troops in the field. So they may know tactics, but the Army is largely ignorant of *operational reach* and the problem of tyranny of distance remains unsolved for the US forces and Australian.

In this context I do not feel any inferiority compared to those in uniform. In fact my solution has been duplicated in a work by a

[see more](#)

^ | v • Reply • Share ›



calinodpar → Greg Chalik • 2 years ago

Greg,

I can not fathom a thing you are saying. You are speaking grade A nonsense. There is a total lack of coherency in anything you are saying. You somehow think you are the only person in the room that understands strategy and somehow the military professionals and then government got it wrong.

In relationship to you speaking truth. You need to take a long hard look in the mirror, learn what truth is, and maybe apply it to your own thinking.

^ | v • Reply • Share ›



Greg Chalik → calinodpar • 2 years ago

Failure to point to specific ISSUE suggests that you prefer to fight strawmen. That doesn't take a lot of valour.

Oh wait, military professionals and governments ALWAYS get their strategy right?

I'm just going to wait for the Victory in Afghanistan Day parade. I missed the one for Iraq. But we did win in Vietnam....right?

^ | v • Reply • Share ›



calinodpar → Greg Chalik • 2 years ago

Greg,

Why don't you work in the department and shape the conversation from the inside? How would you shape the discussion and the outcome?. What would your force look like? What would be the role of armoured vehicles?

^ | v • Reply • Share ›



Greg Chalik → calinodpar • 2 years ago

I don't want to sit behind a desk or have endless discussions. There is no time for that.

The role I need allows me to work with engineers maybe at Puka and field units to actively participate in the final design engineering of systems and doctrine in the practical hands-on way. This has to start almost immediately.

Other aspects of it others can do once they have the new CONOPS. As I said, I'm not reinventing the wheel. Simplicity too is a principle of war :-)

Department never offered me anything except a threat from a certain brigadier. It seems he expected me to park a prototype on the lawn.

People at PMO change all the time, and there is no transparency or accessibility to them. Army is not a porous organisation that invites ideas. Ideas are only welcome if they

[see more](#)

^ | v • Reply • Share ›



calinodpar → Greg Chalik • 2 years ago

Greg,

Have you got any papers I can read?

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