

Conventional Prompt Global Strike: Arms Racing and Strategic Stability in a Post-Unipolar World

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Abstract:

Despite efforts by its proponents to resist it, the link between the Conventional Prompt Global Strike (CPGS) system and the wider trend towards increasing the role of advanced conventional weapons (including ballistic missile defence) in the US defence posture is impossible to ignore. The three articles in the special section on CPGS in this issue all point towards a serious disjuncture between the way CPGS is viewed in Washington and the way others are reacting to its development. This article reflects on the concerns raised in the three articles but does so against the wider backdrop of a shift towards a multipolar distribution of power at the global level in the decades to come in which decisions about CPGS may not always be driven by the United States. In light of this, the article discusses three avenues for responding to the problems associated with CPGS, the most important of which is the recognition in Washington that it currently has the ability to prevent an advanced conventional weapons arms race before it begins.

Some two decades after the US-led Revolution in Military Affairs (RMA), advances in military technology and engineering have allowed the development of an array of advanced precision conventional weaponry that is increasingly prominent at the strategic level. This includes various new global strike capabilities (including anti-satellite forces), significant improvements in anti-missile defences, as well as a host of more nebulous cyber capabilities. All of these technologies have implications for how we think about and manage nuclear weapons and major power relationships, and will create, in the words of Joshua Pollack in his contribution to the special section, “a more complex set of interactions” within what is an already fragile nuclear order.

Taken together, these developments suggest that we are now standing on the edge of a major new era of nuclear affairs – one in which advanced conventional weapons become significant factors in the defence postures of the major nuclear-armed states – and one that will have significant implications for strategic stability and crisis management, arms control and for global nuclear order more broadly. This is why the relative lack of scholarly attention on the issue of conventional prompt global strike (CPGS) programmes¹ has been of such concern to the handful of analysts who have been following its development in recent years.² As the excellent articles by Dennis Gormley, James Acton and Joshua Pollack point out; the development of CPGS (alongside other strategic conventional weapons) has the ability to pose very serious challenges for major power relations in the years ahead. In particular, Washington’s current inability to recognise a classic ‘security dilemma’³ when it sees one, means that it is pressing ahead with a programme which Russia views

as, in Acton's words, "profoundly threatening" while applying pressure to China's strategic posture that is, according to Pollack, "potentially significant, with deleterious effects on crisis stability." The authors are to be congratulated for raising this often-overlooked issue in contemporary strategic affairs and, importantly, for doing so in the pages of the premier scholarly journal on nuclear weapons issues. This is not just an 'emerging technologies' issue but something that is of direct concern to anyone concerned with the avoidance of nuclear war.

The three articles all point to this issue as being highly problematic in terms of Washington's relations with the two states that might be thought of as its actual or potential strategic rivals – Russia and China. Yet the picture that emerges from their analysis, of an action-reaction dynamic with the potential to create a new advanced conventional weapons arms race, needs to be thought of in an even wider context than is done by the three authors here as we move into a post-unipolar world.

The Larger Context

For the past generation the development of advanced conventional weapons – or as James Acton describes them "strategic conventional weapons" – has been a distinctly American project, and one that was primarily confined to the drawing board rather than actual deployment. But in the past twenty years considerable technological improvements have seen first the development of various precision strike and defence systems at the tactical level, and now increasingly at the strategic, global level too. In this sense, contra the official position in Washington (which is repeatedly repudiated by the authors of the special section), CPGS cannot be viewed as separate to the larger trend towards deploying advanced conventional weapons. To do so is naive and dangerous. The US now has a functioning, albeit limited, national missile defence system deployed, real-world tests and research are continuing apace of a variety of prompt strike, and one need only look at the Stuxnet attack on Iran to envision the potential of "cyber" attacks on nuclear security and stability, and especially command and control systems. The spectre of future technological breakthroughs and the perception of a significant challenge to the credibility of their nuclear forces therefore loom large for a variety of states whether Pentagon officials will admit this publically or not.

Much of the problem with CPGS (and to a lesser extent perhaps BMD) is that its proponents in the US appear to presume that if the US takes a big enough lead to begin with, then it will easily establish itself as the dominant player in this technology space. Other analysts do not appear to have even considered the possibility that the US programme is likely to spark a concomitant response from others let alone potentially drive an arms race in strategic conventional weaponry.⁴ China and Russia are the first movers in this regard with India positioning itself to join them. Other

states already seem likely to follow including Japan (responding to China) and Pakistan (responding to India)⁵; and similar dynamics could emerge across the Middle East. Yet far too much of the analysis of the CPGS issue focuses on US capabilities, targets and budgets as if these will set the agenda forever.⁶ As such, proponents of CPGS in Washington need to ask themselves if they will be so enamoured of this technology once it is in the hands of a number of states including potential adversaries as well as allies who may draw the US into a conflict it would otherwise wish to avoid.

The choice to pre-emptively strike a fleeting target at short notice or the benefits of combining CPGS and missile defence to increase the vulnerability of an adversary's nuclear forces may not be the sole preserve of the US for long. Pollack points out that "China has long taken technologically advanced states as role models for its own military and technological pursuits, in types if not always in numbers." This is true of all rising powers given that emulating the basic postures of the most militarily powerful states in the system is a logical strategy for those trying to rise up the global hierarchy in terms of power and prestige.

Dennis Gormley's article mentions the important role of the famous RAND strategist Albert Wohlstetter in the origins of the US programme. In arguing the case for policymakers in Washington to avoid the trap of thinking about CPGS purely in US-centric terms today, one can look to Wohlstetter's farsightedness in his 1968 warning that,

If future technology reduces further the difference between fighting a war close by or far off, it can do this not just for the United States, of course, but for other nations as well. This is only one reason that technical developments should not fortify any illusion of omnipotence.⁷

Wohlstetter, having witnessed how quickly the US lost its 'window' of nuclear primacy in the mid-1940s, well understood the futility of attempting to gain a monopoly over a specific weapons technology. As the economic and industrial gap between the traditional highly industrialised powers and the rising powers of the 'Global South' shrinks, the issue of advanced conventional weapons will not always be driven by decisions in Washington. To put it simply the 'rise of the rest' and the resulting relative decline of US primacy in the years to come requires policymakers in Washington today to be attuned to the long-term consequences of their actions. Starting a strategic conventional weapons arms race with Russia and China is one thing. Having done so at the outset of a new multipolar era, with all the implications that this has for the likelihood of conflicts between the potential 'poles of power' in the decades to come,⁸ is something else. It is time that the discussion about CPGS is had against this wider strategic backdrop.

Preventing an Arms Race Before it Begins

So what are the options open to manage this new challenge? Reflecting on the overall picture painted by the analysis of current CPGS developments in the special section, three policy recommendations stand out to the present authors:

First, we must be clear that we are currently at a cross-roads; while BMD systems have been deployed and are spreading, advanced precision strike capabilities – which arguably represent an even bigger problem in the long run - remain nascent, and still require enormous future investment if they are to become fully manifest. As James Acton notes, “it would be wrong to assume that Russia’s eventual acquisition of conventional boost-glide weapons is a done deal.” The same is probably also true of China. Both would probably prefer not to spend huge sums of money on these new systems, and instead, continue to rely on ‘traditional’ notions of nuclear deterrence. However, should such conventional precision strike capabilities – able for example, to destroy or compromise missile silos, command and control centres or other vital infrastructure – continue to develop apace, and be developed not just by the US, this will raise enormous concerns for a whole host of states. There is the uncomfortable spectre of a future conventional arms race (linked in complex ways to future nuclear modernisation efforts) from which no state is likely benefit.

Therefore serious consideration must be given to whether the development of conventional precision strike munitions with global reach is commensurate with long-term US interests, and whether the perceived strategic role might be performed by other capabilities (such as stealth aircraft or cruise missiles for example). The past is littered with arms races developing as a result of a state’s concerns about being left behind militarily in a world in which the future intentions of a potential adversary are inherently unknowable,⁹ and advanced conventional systems hold all the right ingredients for another one. Even if one makes the argument that without the United States’ development of CPGS, other states would still pursue these capabilities (a dubious argument with little evidence to support it) and nothing short of a CPGS ban would suffice, such a move would be much easier before these systems are firmly established in force postures and with domestic constituencies to support them. In particular, a test ban will be easier to negotiate pre-deployment than a weapons ban would be afterwards.¹⁰ To put it simply, stopping the arms race before it begins is still an option for policymakers in Washington today and it is enormously important that this point is not lost in the growing discussions around CPGS there and elsewhere.

Second, if CPGS capabilities become a reality, and spread to new actors, there will be – as Dennis Gormley notes – a need for some sort of transparency, particularly about capabilities (and specifically warhead types), greater clarity about possible responses and doctrines, and creating opportunities for confidence building measures. All three articles in the special section raise

concerns about the risks of ambiguity in relation to the use of CPGS and the thresholds for response (nuclear or otherwise). In the absence of more far-sighted efforts to roll-back the development of these weapons, significant efforts will need to be made on establishing the ‘rules of the game’ in this area. This opens up an important role for scholars and analysts working in strategic studies and International Relations – it is to be hoped that the kind of scholarship found in the special section in this issue encourages further work in the years to come focused on how the most destabilising effects of advanced conventional weapons might be mitigated. The most pressing need in terms of geographic focus would appear to be in the Asia-Pacific region given the confluence of strategic competition between the US, China and Russia in that part of the world.¹¹ The issue raised repeatedly in the special section of reducing both warhead and destination/target ambiguity stands out as another topic in need of sustained analysis.

Third, if CPGS capabilities are to spread and become normalised, and the view is taken that a ‘more might be better’ approach is dangerous in a world in which these weapons are linked to nuclear postures,¹² then it follows that we must consider how these new systems might be included in arms control discussions. For example, while the New START treaty counts conventional warheads on strategic launchers under its terms, it does not legally address missile defence and would not include boost-glide systems (or cyber). Likewise, it is hard to see how new advanced conventional weapons systems with strategic capabilities can remain outside the major debates at the NPT: these developments will undoubtedly make further nuclear reductions far more difficult and present a major setback to the disarmament agenda. The worst-case scenario is an advanced conventional arms race that concomitantly fuels global nuclear proliferation (both horizontal and vertical), heightens nuclear alert statuses and drives nuclear modernisation. Finally, the challenge presented by cyber remains a further major area in need of examination – the idea of global prompt strike in 300 milliseconds through cyberspace might be even more of a concern than exotic hypersonic one in measured in minutes.¹³

Addressing CPGS concerns will further complicate the already difficult arms control agendas in various settings but this does not change the need to negotiate some kind of limits on the deployment of such a potentially destabilising technology. At the multilateral level, initial steps might be taken by, in time, establishing a working group to consider the issue under the auspices of the UN General Assembly First Committee.

Conclusion

The analysis in the special section points to the clear conclusion that current US plans to develop CPGS are already provoking serious concerns in some state capitals and unsurprisingly, a response

by those who maintain a nuclear deterrence relationship with Washington. In the short-term, whether the US CPGS system will only prompt an attempt by others to attain a degree of advanced conventional parity (what Barry Buzan and Eric Herring refer to as the ‘arms dynamic’ in which states attempt to keep up with one another)¹⁴ or instead spark a more serious arms race (in which each tries to gain a qualitative ‘edge’ over the other) is difficult to predict. But neither will even be considered a factor if we only think of the issue in terms of Washington calling all the shots forever. In fact, even if the US continues to try and maintain its current superiority in this area, even if others are just trying to keep up, an arms race will in effect have begun. We must also be clear that this isn’t simply a US-Russia or US-China issue. Although these remain the most pressing and likely theatres in which these dynamics will play out, it is possible to envision similar dynamics having major consequences in South Asia, the Middle East and other regions of the world. Likewise, it is important to think about how the suite of new technologies that complement and augment each other, are beginning to blur the lines behind conventional and nuclear, and together present a significant challenge to many of the central tenets of global nuclear order; perhaps most notably strategic stability, arms control and the threat of arms racing, and of course, to the long term goals of nuclear reductions and disarmament.¹⁵ Decisions taken by the United States now on what might seem like another high-end technology borne of the ongoing RMA, may well shape the global nuclear environment for the next generation. In the twilight years of a largely uncontested US hegemony,¹⁶ Washington’s leaders have a unique window of opportunity to avoid taking the world down a path of potentially even greater danger than was faced in the first nuclear age, but that window will not stay open for long. Arms control and lessening ambiguity around the role of CPGS in defence postures will be important but both are sub-optimal. The best solution to the threats that CPGS poses to strategic stability (including to the national security of the United States over the long-term) is for its proponents to recognise a security dilemma when they see one and prevent the CPGS arms race before it begins.

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¹ Conventional Prompt Global Strike is sometimes referred to a global precision strike or conventional strike.

² The best overview is provided in James Acton’s excellent monograph, “*Silver Bullet: Asking the Right Questions About Conventional Prompt Global Strike*”, (Washington DC, Carnegie Endowment for International Peace: 2013)

³ The concept of the security dilemma in the International Relations literature refers to a situation in which one state makes what it considers to be a defensive move. This is interpreted by that state's current or potential future adversaries as having given it an offensive advantage and in so doing presents the current or potential adversary with the dilemma of whether to respond in kind (thereby producing a likely spiral of tit-for-tat moves and counter-moves by both sides). The dilemma is said to be produced by the inability of the first state to see its 'defensive' move from the point of view of the other.

⁴ See for example, M. Elaine Bunn & Vincent A. Manzo, "Conventional Prompt Global Strike: Strategic Asset or Unusable Liability?", Institute for National Strategic Studies, National Defense University, (February 2011), http://csis.org/files/media/isis/pubs/110201_manzo_sf_263.pdf and Bruce M. Sugden, "Speed Kills: Analyzing the Deployment of Conventional Ballistic Missiles", *International Security*, 34, (Summer 2009), pp.113-146

⁵ The development of missile defence capabilities by both Japan and India would seem to suggest that defense policymakers in both countries have little appreciation of the growing and dangerous link between strategic conventional weapons and nuclear stability. See respectively, Christopher W. Hughes, "Japan, Ballistic Missile Defence and Remilitarisation", *Space Policy*, 29 (May 2013), pp.128-134 and Sumit Ganguly, "India's Pursuit Of Ballistic Missile Defense", *The Nonproliferation Review*, 21, (2014) pp.373-382

⁶ One of the few exceptions is the excellent analysis in chapter 4 of James M. Acton, "*Silver Bullet? Asking the Right Questions About Conventional Prompt Global Strike*", (Washington, DC: Carnegie Endowment for International Peace, 2013), <http://carnegieendowment.org/files/cpgs.pdf>

⁷ Albert Wohlstetter, "Illusions of Distance", *Foreign Affairs*, 46 (Jan 1968) p.246

⁸ No matter where one stands on debates about polarity and war, there are very few who would deny that a transition from one distribution of power to another does not provide increased opportunities for rivalry, brinkmanship and disputes between rising and declining powers. See, Jack S. Levy & William R. Thompson, *Causes of War*, (Chichester: Wiley-Blackwell, 2010), pp. 28-54.

⁹ Evan Braden Montgomery, "Breaking out of the Security Dilemma: Realism, Reassurance, and the Problem of Uncertainty", *International Security*, 31 (Fall, 2006), pp.151-185

¹⁰ For a range of views on the desirability and feasibility of a test ban on hypersonic missiles, see, *Bulletin of the Atomic Scientists*, "Development and Disarmament Roundtable: Test ban for hypersonic missiles?", June-August 2015, <http://thebulletin.org/test-ban-hypersonic-missiles8422>

¹¹ On the interaction between the US 'pivot' to Asia and the growing role of advanced conventional weapons in its defense posture, see, Andrew Futter & Benjamin Zala, "Coordinating the Arm Swing with the Pivot: Nuclear Deterrence, Stability and US Strategy in the Asia-Pacific", *The Pacific Review*, 28 (2015), pp.367-390

¹² For discussions of this see, Christine M. Leah, "Deterrence and Arms Control in a Second Conventional Age", *Comparative Strategy*, 34 (2015), pp.401-421 and Andrew Futter & Benjamin Zala, *A Sustainable Approach to Nuclear Zero: Breaking the Nuclear-Conventional Link*, London: Oxford Research Group, (October 2013), <http://www.oxfordresearchgroup.org.uk/sites/default/files/A%20Sustainable%20Approach%20to%20Nuclear%20Zero.pdf>

¹³ This was mentioned by General James Cartwright, in a presentation at the Center for International and Strategic Studies, (4 June 2009), http://www.defense.gov/qdr/transcripts_cartwright_20090604.html

¹⁴ Barry Buzan & Eric Herring, *The Arms Dynamic in World Politics* (Boulder & London: Lynne Rienner, 1998)

¹⁵ On this see, Andrew Futter & Benjamin Zala, "Advanced US conventional Weapons and Nuclear Abolition: Why the Obama Plan Won't Work", *The Nonproliferation Review*, 20:1 (2013) pp.107-122

¹⁶ Simon Reich & Richard New Lebow, "*Good-Bye Hegemony! Power and Influence in the Global System*", (Princeton and Oxford: Princeton University Press, 2014)