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## Myth of the “Game-Changer” Weapon

*By Richard A. Bitzinger*

### Synopsis

*Many advanced weapons systems are frequently touted as “game-changers,” and yet they rarely achieve their proffered, decisive impact. Ultimately, victory in war is more than just equipment – it is also a matter of tactics and training, leadership and morale, geography, logistics, and sometimes just plain luck.*

### Commentary

NEAR THE end of the Second World War, Nazi Germany unleashed a host of “miracle weapons” (*Wunderwaffen*) on the Allies, in a last-ditch attempt to stave off defeat. These secret weapons included the V-1 flying bomb, the V-2 missile, the Me-163 “Komet” rocket-powered fighter jet, and the Me-262 – the world’s first operational jet fighter. The Germans also developed some of the first remote-controlled glide bombs and heat-seeking air-to-air missiles.

These weapons were impressive, and some – particularly the V-1 and V-2 – were even terrifying. But none won the war for the Germans or even delayed the eventual Allied victory. They could have been game-changers, but instead they ended up as museum pieces. And this is the problem with the whole “game-changer” argument when it comes to “new and amazing” weapons: they actually rarely tip the balance in war. They may be new and they may be amazing, but in the end they are just one tool in a rather large toolbox comprising the whole operational art of warfighting.

### Today’s Supposed Game-Changers

Take the case of the J-16D, a new Chinese fighter jet based on the Russian-designed Su-30MKK. In a recent article in *The National Interest* (“Forget China’s Stealth Fighter: This Is the Plane America’s Military Should Fear,” April 20, 2018), the author, Sebastien Roblin, makes a powerful case that this plane could turn out to be a game-

changer for the Chinese, particularly in the South China Sea (although, to be fair, he never uses the term “game-changer”).

The J-16D is an electronic warfare plane, equivalent to the US EA-18G Growler. Roblin speculates that it could carry 2-3 jamming pods under its wings and fuselage, “each optimised [to different] radar frequencies”. Such a configuration would still permit the aircraft to carry up to six anti-radiation missiles. Such a weapon, he implies, could “pose a nightmare” for large Aegis-equipped warships, the kind operated by the US, Japanese, South Korean, and Australian navies.

Now Roblin is not an alarmist, nor is he the first analyst to credit the Chinese too much for their “superb and secret weapons”. About a decade ago, many in the Western China-watching community were similarly panicked over China’s DF-21D anti-ship ballistic missile (ASBM). The ASBM, it was argued, was such a novel weapon that there was “no defence against it”. Hence, the DF-21D was deemed a “carrier-killer,” one that in particular threatened the US Navy’s whole approach to carrier-based strike operations.

The DF-21D is certainly a uniquely threatening weapon, but Western assessments of it being a game-changer have been tempered in recent years by the fact that US countermeasures have also improved, plus an acknowledgement of the limitations that the Chinese still face when it comes to things like target acquisition and terminal homing.

Other presumed game-changers include hypersonic missiles or the Russian *Shkval* torpedo, which uses super-cavitation technology (basically creating a bubble of air around itself) to travel at speeds of up to 200 knots (370 kilometres per hour). Again, the presumption is that there is no way to defend against these weapons.

### **Disruptive Deterrent or War-Winner?**

For a weapon to be a genuine game-changer, it must be truly disruptive as a deterrent or a piece of warfighting equipment. In other words, it must either undeniably discourage an opponent from thinking about engaging in conflict in the first place, or else be unequivocally critical to ending a conflict.

Few weapons can meet such high standards. Even nuclear weapons – perhaps the greatest game-changer – have in fact had little impact on most inter-state conflict over the past 70 years. To be sure, they have probably played a critical role in preventing nuclear-armed states from going to war – at a nuclear level. Nuclear-armed states rarely clash with each other, and when they do, they almost immediately attempt to defuse and de-escalate crises so as not to lead to situations which could conceivably escalate (such as the Cuban Missile Crisis or the 2001 Sino-American EP-3 incident).

But nuclear weapons have not prevented nuclear powers from skirmishing with each other in other ways, such as through proxy wars (Vietnam during the Cold War or Syria today) or in competitions over regional hegemonies or spheres of influence – for example, the US-China duel over “indisputable sovereignty” versus “freedom of navigation” in the South China Sea.

Moreover, states with nuclear forces do not appear to have enjoyed any special leverage or power over countries that do not possess such weapons. Non-nuclear Japan does not defer to nuclear-armed China when it comes to the Senkaku/Diaoyu Islands, nor does Vietnam or the Philippines appear to be cowed by Beijing in the South China Sea.

### **Flaws in “Game-Changer” Idea: Trivialising Warfare?**

Ultimately, there are two major flaws with the “game-changer” argument.

In the first place, it can lead to the mistaken impression that military predominance might be gained simply by acquiring a single piece of equipment (a fighter jet, a missile, a submarine). In reality, military power is synergistic, a collection of a number of disparate, mutually supporting systems (General Dwight D. Eisenhower, for example, ranked the humble jeep and the C-47 cargo plane as two of the key “tools of victory” in World War II, along with the atomic bomb and other armaments).

More critically, however, the idea of “game-changer” weapons trivialises the whole operational art of war. It reduces warfighting to just hardware. War and conflict are more than just equipment – they are tactics and training, leadership and morale, geography, logistics, and sometimes just plain luck. Technology alone does not win wars.

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