



STATE OF THE GAME

BUILDING PACAF'S COMPETITIVE MINDSET

AUGUST 2021

TRAINING THE DRAGON: NOT QUITE THERE

China attempts to advance its tactics development to keep up with the U.S. Air Force.

As the People's Liberation Army Air Force (PLAAF) modernizes in line with President Xi Jinping's initiatives to overhaul the military, tactics development is a priority. PLAAF doctrinal writing often [discusses](#) combat methods 战法 and tactics 战术 together as two terms that are analogous to tactics as known in Western military doctrine. Nuances in the characters suggest that in the Chinese view, there are some elements that are more of an art, while other elements are inflexible and bound by the laws of physics.

Historically, tactics revision was a burdensome process due to reliance on ground-based controllers and emphasis on scripted air-to-air engagements

that did not afford pilots the discretion to inform tactics development. However, air competitions and operational changes over the past decade have facilitated progress away from risk-averse, scripted tactics toward "free air combat" training that seeks to emulate U.S. training.

A heavily prescriptive seven-step process for tactics development [previously](#) took about two years, but as the PLAAF modernizes, it has sped up this process, accelerating its ability to institutionalize new tactics throughout the force, moving the PLAAF incrementally closer to Western standards. While the PLAAF hasn't reached the level of the U.S. Air Force yet, they're trying to catch up.



The PLAAF is introducing advanced technology like the J-31 fighter and the PL-15 missile, but their tactics development continues to lag behind their gear.

CHINA'S TOP GUN: PLAAF TRAINING BASES

As the PLAAF develops its training and tactics, the infrastructure that supports this experimentation also evolves.

Nellis Air Force Base outside Las Vegas is famous world-wide for hosting the Air Force's premier combat training. As the PLAAF rushes to catch up, they have modernized and expanded their own infrastructure to try to mirror our capabilities.

Two major test and training bases support the [development](#) of the PLAAF's elite pilots: Cangzhou and Dingxin. Cangzhou serves as the home of the PLAAF's "blue force" unit which plays the role of an enemy air force in training; the PLA refers to itself as the "red force" and adversaries as the "blue force." When first stood up in the late 1980s, this unit simulated the Soviet Union, but later switched to simulating the United States and Taiwan.

The PLAAF conducts its most consequential tactics experimentation at Dingxin. Experts [assess](#) the base as analogous to Nellis Air Force Base, with elements of Edwards and Eglin Air Force Bases, all in one sprawling remote desert location with clear weather and open horizons. Dingxin is host to large force joint exercises such as Red Sword, roughly equivalent in scope to the U.S. Air Force's Red Flag exercise.

Dingxin also serves as the venue for Golden Helmet, an annual air competition. According to a [RAND report](#) on the PLAAF's elite pilots, Golden Helmet was first held in 2011 to "improve and assess pilots' skills and capabilities in combat conditions." It showcases nascent efforts to move the PLAAF away from scripted and ground-controlled air combat towards what the Chinese term "free air combat" training; however, this development has been impeded by culturally embedded reliance on ground-based controllers and a highly risk-averse safety culture. Chinese media proclaim that Golden Helmet has been not only a driver in spurring bottom-up tactics overhauls, but also in highlighting the need for training in complex environments including electronic countermeasures and denial of precise positioning data.

Why It Matters: Cangzhou and Dingxin highlight the importance the PLAAF puts on pushing the envelope on air combat training. It is critical that PACAF continues to invest in advanced, networked training ranges allowing us to conduct realistic exercises with joint and allied forces in complex environments.



ABOVE: Dingxin includes a training mockup (left) of Taiwan's Taichung airport (right).

LEFT: Dingxin is located away from population centers, giving pilots the opportunity to use live-fire ranges and train under electromagnetic jamming conditions. Cangzhou allows pilots to train in maritime flight zones.



A monthly review of competition thoughts and activities from PACAF's

STRATEGIC
COMPETITION TEAM