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## First Modern Tanker Observed at Chinese Airbase

by

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## Background

Satellite imagery from mid-October confirms China has taken delivery of one Ilyushin IL-78/MIDAS air refueling tanker it ordered from Ukraine (Figure 1).<sup>1</sup> China reportedly purchased three IL-78 tankers from Ukraine in 2011. The plane is the first modern addition to China's small and outdated fleet of air refueling aircraft, which consists of about 12 modified BADGER bombers designated H-6U (Figure 2). For comparison, the U.S. Air Force operates 473 tanker aircraft.<sup>2</sup> The IL-78 carries two to three times as much transferable fuel as the H-6U tanker. Like the H-6U, the IL-78 features a "probe-and-drogue" refueling apparatus that allows it to refuel multiple small aircraft simultaneously.

## **Preliminary Analysis**

The imagery of the Chinese IL-78 shows the aircraft at Wuhan-Paozhuwan airbase in Hubei Province, home of the 38th Air Regiment of the 13th Transport Division of the People's Liberation Army (PLA) Air Force (Figure 3). The unit consists of Y-7, Y-8, and IL-76 transport planes.

- The IL-78 apparently is not part of China's H-6U tanker contingent of the 23rd Air Regiment of the 8th Bomber Division, stationed at Leiyang airbase in Hunan Province. The PLA Air Force may calculate that IL-76 pilots will adapt to flying the IL-78, an IL-76 derivative, more quickly than pilots of H-6U tankers.
- The IL-78 tanker's placement at a PLAAF airbase, rather than the Xi'an Yanliang aircraft testing site, may indicate the IL-78 already has been integrated into the PLA Air Force's air refueling corps, and that some PLA Air Force pilots have qualified on IL-78 tanker operations.

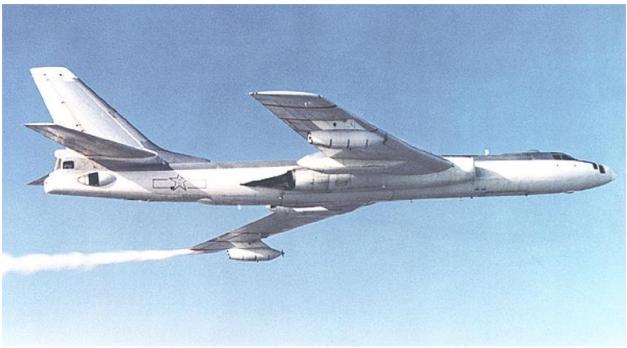
China's air refueling fleet, which now consists of one confirmed IL-78 tanker and 12 H-6U tankers, is still too small to support sustained, large-scale, long-distance air combat. China will address the size of its fleet with more acquisitions over the next decade. In addition to the two IL-78 tankers still due from Ukraine, China purchased up to 10 IL-78 tankers from Russia in the mid-2000s. Production issues have prevented Russia from delivering any planes to date, but deliveries could begin by the end of 2014. Moreover, China may build new tankers based on the airframe of the indigenous Y-20 transport aircraft, which is still in development. Over the long term, these additions could significantly increase China's air combat range. However, China lacks adequate support infrastructure on the ground, and most of China's fighter aircraft cannot refuel in the air.<sup>3</sup> The PLA Air Force will need to upgrade its infrastructure and modernize the rest of its aircraft to take advantage of its expanding air refueling fleet.



Figure 1: Chinese IL-78 at Wuhan-Paozhuwan Airbase, Wuhan Province

Source: Mike Yeo, "First Chinese II-78 tanker seen at PLAAF base," IHS Jane's 360, January 3, 2014. http://www.janes.com/article/45319/first-chinese-il-78-tanker-seen-at-plaaf-base.

Figure 2: Chinese H-6U/BADGER Air Refueling Tanker



Source: Carlo Kopp, "The PLA-AF's Aerial Refuelling Programs," Air Power Australia, January 27, 2014. http://www.ausairpower.net/APA-PLA-Tanker-Programs.html.



Figure 3: Map of China – Wuhan-Paozhuwan Airbase and Anqing Airbase

*Source:* Google Maps. Adapted by the author with data from Scramble, "Armed Forces Overview." *http://www.scramble.nl/orbats/china/airforce.* 

<sup>&</sup>lt;sup>1</sup> Mike Yeo, "First Chinese II-78 tanker seen at PLAAF base," *IHS Jane's 360,* January 3, 2014. http://www.janes.com/article/45319/first-chinese-il-78-tanker-seen-at-plaaf-base.

<sup>&</sup>lt;sup>2</sup> Commission staff judgments based on U.S. Air Force, "KC-135 Stratotanker." http://www.af.mil/AboutUs/FactSheets/Display/tabid/224/Article/104524/kc-135-stratotanker.aspx; and U.S. Air Force, "KC-10 Extender." http://www.af.mil/AboutUs/FactSheets/Display/tabid/224/Article/104520/kc-10extender.aspx.

<sup>&</sup>lt;sup>3</sup> Commission staff judgments based on the following sources: Gabriel Collins, Michael McGauvran, and Timothy White, "Trends in Chinese Aerial Refueling Capacity for Maritime Purposes," in Andrew S. Erickson and Lyle J. Goldstein, eds., *Chinese Aerospace Power: Evolving Maritime Roles* (Annapolis, MD: Naval Institute Press, 2011), pp. 194-195, 199; Michael D. Swaine, *China's Military and the U.S.-Japan Alliance in 2030: A Strategic Net Assessment* (Washington, DC: Carnegie Endowment for International Peace, 2013), p. 53.