



U.S.-China Economic and Security Review Commission
Staff Bulletin

November 18, 2014

First Modern Tanker Observed at Chinese Airbase

by

Michael Pilger
Research Intern, Security and Foreign Affairs

Disclaimer: This paper is the product of professional research performed by staff of the U.S.-China Economic and Security Review Commission, and was prepared at the request of the Commission to support its deliberations. Posting of the report to the Commission's website is intended to promote greater public understanding of the issues addressed by the Commission in its ongoing assessment of U.S.-China economic relations and their implications for U.S. security, as mandated by Public Law 106-398 and Public Law 108-7. However, the public release of this document does not necessarily imply an endorsement by the Commission, any individual Commissioner, or the Commission's other professional staff, of the views or conclusions expressed in this staff research report.

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).¹ 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 The plane is the first modern addition to China's small and outdated fleet of air refueling aircraft, which consists of about 12 modified BADGER bombers designated H-6U (Figure 2).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.² 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 28th Air Regiment of the 10th Bomber Division, stationed at Anqing airbase in Anhui 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.

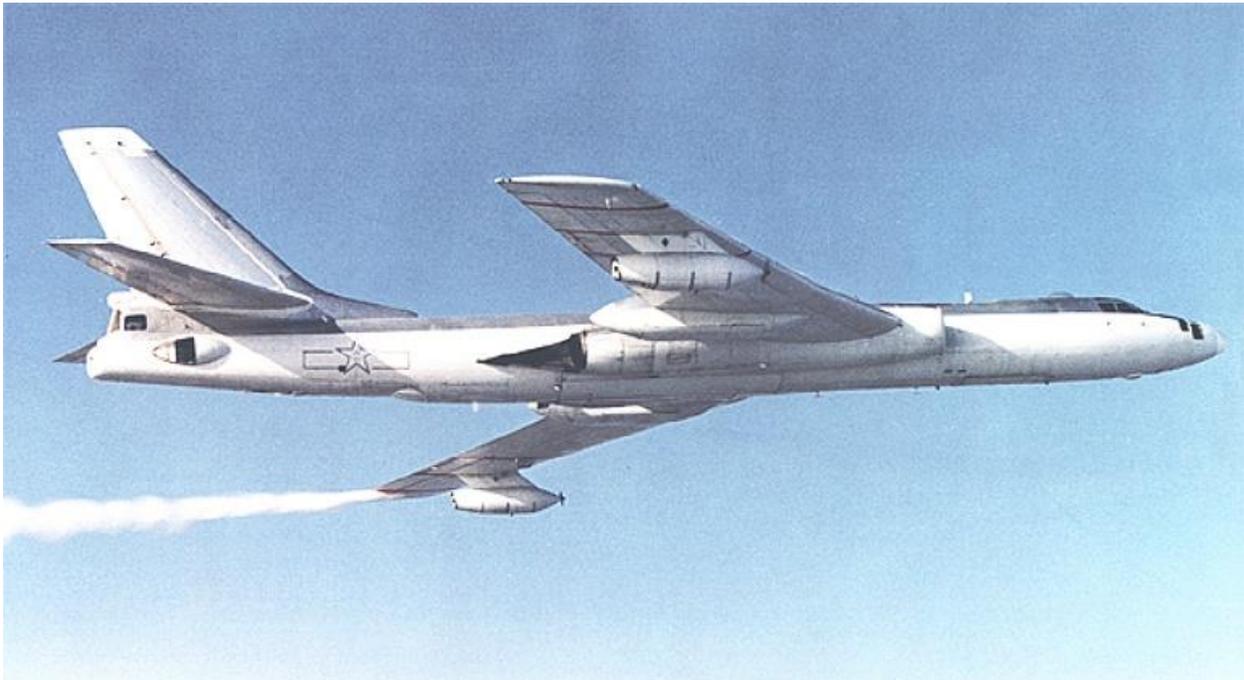
China's air refueling fleet, which now consists of one confirmed IL-78 tanker and 12 H-6U tankers, is still too small to support sustained, large-scale, long-distance air combat. China will address the size of its fleet with more acquisitions over the next decade. In addition to the two IL-78 tankers 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.³ 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 Il-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>.

¹ Mike Yeo, “First Chinese Il-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>.

² 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-10-extender.aspx>.

³ 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.