



North Korea's Air Force Adds AWACS Platforms to Aircraft

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EXECUTIVE SUMMARY: The North Korean Air Force has installed AWACS/AEW platforms on several Russian transport aircraft. If the installation is based on the Chinese KJ2000, there is a good chance that Israeli know-how has reached the North Koreans indirectly.

Enter the DPRKAF's first AWACS/AEW* platform

The air force of North Korea (DPRKAF) has not added new aircraft to its aging inventory for many years. Part of its order of battle was three Ilyushin IL-76MD transport aircraft (serials P-912 to P-914), acquired from Russia in the mid- to late 1990s, that were intended for medium-range transport of manpower and cargo as well as parachuting. The aircraft, like all large transport aircraft of the DPRKAF, carries the livery and titles of Air-Koryo, the national airline, as the airline and the air force operate as one single entity.

In October 2023, after a long period of disuse, one of North Korea's three IL-76MDs was towed from Pyongyang/Sunan airport, where it was housed alongside other dormant aircraft of Air-Koryo (the North Korean airline company), to a remote apron that is usually used to house aircraft serving the Kim family. The aircraft was brought inside a hangar and the area around it was fenced. Work then commenced on the aircraft inside the hangar.

In February 2025, a [satellite image](#) showed the aircraft parked within the fenced area with what looked like an installation on top intended for mounting an early-warning radar dish. Inside the adjacent hangar, the tail of a second IL-76MD could be seen, suggesting that the entire IL-76MD fleet might be undergoing the same process.

Within three months, local technical crews, possibly under the supervision of Chinese advisors, mounted an early-warning radome on top of the aircraft. A month later, an image of the same location published by 38north.org showed the aircraft at the same fenced area with the radar dish installed. A comparison of the installation with that done on Chinese IL-76 aircraft shows distinctive similarities.

China first attempted to obtain an IL-76 based AWACS platform in 1997, when Russia agreed to sell four such aircraft to the PRC air force. While these were originally standard IL-76A transport models, the aircraft were to be modified by the Israeli firm ELTA at the Israel Aerospace Industries (IAI) facility at Ben-Gurion Airport with the addition of an ELTA-developed Phalcon AEW suite. The first aircraft, bearing Russian registration RA-78740, arrived at Ben-Gurion Airport in October 1999. Work was completed in early 2002, but the incoming Clinton administration refused to permit its sale to China so as to prevent its potential use against Taiwan. Israel was forced to cancel the project.

Following the imposition of sanctions by the US, the PRC government decided to continue the project locally. The first aircraft, now bearing Chinese military serial number 762, was modified successfully and integrated into No. 34 division at Nanjing. The other three aircraft were later completed as AWACS platforms, now designated KJ-2000. In June 2006, one of the four aircraft crashed in a rural area of eastern China.

Why would North Korea need an AWACS/AEW platform?

The DPRK national security perception sees a potential threat posed by three enemy countries: the United States, South Korea, and Japan. Its air defense system consists of outdated radar stations supplied by the Soviet Union and the PRC. These ground-based radar stations provide only a partial picture of the enemy and are prone to electronic warfare disruptions. The airborne IL-76 AWACS/AEW platform, when flown at altitudes of 8,000-10,000 feet or higher, can provide a wide

and clutter-free picture of the airspace around the DPRK, particularly when looking towards South Korea and Japan. It can detect incoming aircraft and gather intelligence on army movements on the ground, as well as on the disposition of naval assets in the Yellow Sea and Sea of Japan (East Sea). It can also provide continuous radar coverage if ground-based stations are destroyed or incapacitated.

Unlike ground-based radar stations, the aircraft has a long range (estimated at 200 nautical miles), so its early warning capabilities can bolster the collection of tactical data. On the negative side, the AWACS/AEW system's performance over land is less optimal than over sea, which means the aircraft might have difficulty detecting movement on the ground – particularly in the rugged terrain typical of the Korean peninsula. This can be overcome if the DPRKAF equips the aircraft with suitable systems.

The aircraft has no self-defense capability and is thus easy prey to combat aircraft. Maintaining constant coverage of the ground and airspace would require at least two aircraft operating in rotation. Given that at least one of the two might spend time undergoing maintenance, or being grounded due to technical hiccups or a lack of spares, at least three aircraft will have to be modified for this role.

If all three current aircraft are to be converted, the DPRKAF will face a reduction in its tactical transport capabilities, as it has no other large transport aircraft. To avoid this shortage, the DPRKAF might consider purchasing additional IL-76 aircraft. The addition of an AWACS/AEW platform will also require upgrading current ground-based air defense/combat control centers so as to enable the integrated exchange of intelligence information.

An effective operation will require cooperation and data exchange between air and ground units. In some cases, crews aboard the AWACS/AEW aircraft might be able to make tactical/operational decisions to direct combat aircraft onto their targets. However, in view of the strict discipline enforced within both the Russian and Chinese commands restricting independent decision-making (partly for political reasons), this is highly unlikely to occur in the DPRK, given that its doctrine is largely derived from the practices of the Russians and the Chinese.

An executive jet for Kim Jong-un's family and the elite?

Another new addition to the DPRKAF inventory is a US-built Beechcraft 400A business jet, seen for the first time in images published on the 38north website. The aircraft is usually parked next to a New Zealand-built PAC-750XL, a light single engine transport aircraft of which three or four are thought to have been delivered illegally by the PRC. The Beechcraft 400A is probably also ex-Chinese and imported into the DPRK in violation of US sanctions.

The intriguing question is, what purpose might this aircraft serve? As it is basically a business jet, it may be intended for use by the Kim family, but because it is a twin engine aircraft with a cramped cabin and an unimpressive exterior, it is not really suitable for that purpose. Its other possible use is as an air ambulance. The aircraft is probably the former Chinese tail number B-3905, which is one of two such aircraft sold from the US to the PRC in September 2009 and February 2018. The aircraft bearing the former PRC registration was operated prior to its sale to China in an air ambulance configuration by US company Airmed International, from which it was acquired. It can carry one patient and up to four medical personnel. If its role remains the same as it was while in Chinese service, it is highly plausible that it was delivered as such to the DPRK, enabling the swift transport of DPRK dignitaries to nearby China or Russia in case of a medical crisis. As with the PAC-750XL, the DPRKAF will likely rely on the PRC for spare parts and maintenance support.

(*) **AWACS**: Airborne Warning and Control System; **AEW**: Airborne Early Warning

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