

UAV applying in China: 312 miles with 4G Real-time transmission

A Chinese company recently announced that they have made a successful trial of using UAV to make a round trip patrol to a 156-mile petroleum pipeline. The Chinese company called “Tianyujingwei” (SmartGrid) , also a member of AUVSI, claimed that under the use of 4G communication network, they have already succeeded in transmitting real-time HD video and control the UAV simultaneously for 312 miles.

“The key point of this achievement is that we have the core-tech of UAV’s control and communicate systems, with our collaboration with China Unicom, one of the three telecommunication operators in China,” said Yang, Tianyujingwei’s CTO, “they customized upgraded their existing communication base stations, so our UAV could fly for hours while using the 4G network constantly, which means the petroleum enterprises could cut their expense of expensive data link and new base station.”

According to Yang, this technology can also be applied to other telecommunication operators—with a technological upgrade, oil companies from other countries would easily have their pipelines patrolled by UAV with real-time video.



Furthermore, this specialized solution is not satisfied with solving transmission problems, Tianyujingwei also made a software to analyze data and videos captured by UAV. Using image analysis algorithm, the program automatically locating and identifying risk factors of pipelines. Staff from oil company will enjoy an easier job while the screen tells them where might be leaking or damaged.

The company has now successfully managed over 75 sorties safe flight for China National Petroleum Corporation in Yunnan, a mountainous Province in China's Yunnan-Guizhou plateau, patrolling a 312-mile round trip for their pipelines at least three times a week.