



HAS THE CHINESE “LEAP-FROGGING” TECHNIQUE IN ACQUIRING AEROENGINE TECH FROM MOTOR-SICH BACKFIRED?

Wg Cdr BS Nijjar
Research Fellow, CAPS

Keywords: Motor-Sich Skyrizon, AHL, Helicopter, Yuzhmash, Ukraine

The Court Order

On July 24, 2017 the offices of the over 100 year old Ukrainian aero-engine and industrial gas turbine engine manufacturing concern Motor-Sich were raided by the Ukrainian law enforcement agencies possibly at the behest of General prosecutor of Ukraine (GPU).¹ Subsequent investigations indicated that the company's shares may have been transferred illegally to multiple offshore shell companies without the knowledge or authorisation by the Antimonopoly Committee of Ukraine (ACU). The sale of the shares which took place earlier in 2016 resulted in a Chinese citizen (the owner of the Beijing Skyrizon Aviation Industry Investment Co.) gaining ownership of a staggering 56 percent of company's shares through a network of shell companies registered in the British Virgin Islands and Panama.

Subsequently, as a follow up action on September 07, 2017 the Security Service of Ukraine (SBU) through the Kyiv Shevchenkivsky District Court passed an order to freeze 41.00087 percent of shares in PJSC Motor-Sich (Zaporizhia). These shares were owned by five offshore companies that are registered with a shareholding concern of Ukraine known as the Dragon Capital custodian in Ukraine (Kyiv).² The companies whose shares were frozen/seized were Skyrizon Aircraft Holdings Limited (the Virgin Islands) 207,783 shares (9.99923%), Business House Helena (Panama), 359,727 shares (17.31%), Enfields Trade & Capital Corp (Panama) 64,733 shares (3.115%), Granum Corporation (Panama), 27,086 shares (1.3%) , and Waldo Trade Ltd (the British Virgin Islands): 192,665 shares (9.27%).³

The court in its order stated that it was forced to pass that order as, in its opinion, those

transactions were a part of a larger conspiracy to weaken the state by selling the controlling stake in the company and an intent on the part of new owners to move the company assets as well as production capacity outside Ukraine (veiled reference to China) which would ultimately result in the liquidation of the company. Motor-Sich on its part has played down these reports by issuing a statement that it is a private company and has conducted its business while abiding by the provisions of the law. The actual impact of this order needs to be carefully examined.

Motor-Sich: The Chinese Interest

Motor-Sich has been manufacturing aero-engines (piston) since the year 1916 and had started manufacturing gas turbine aero-engines in 1953 (RD-45 and RD-500 series jet engines). Since then, the engines manufactured by the company have powered an entire series of aircraft including the An-32, An-124 (Ruslan), An-225 (Mriya) as well as the Mi-series helicopters such as the Mi-171, Mi-172, Mi-24, Mi-25, Mi-26, Mi-28, Mi-35 helicopters.⁴

In 1995, after the disintegration of the Soviet Union (in 1991) the enterprise was converted into Motor-Sich Joint Stock Company (JSC). Post 2014 the relations between Russia and Ukraine soured and Ukraine attempted to join the European Union (EU). Hence Russia decided to develop its own engine manufacturing expertise and this signaled an end of its dependence on Motor-Sich.⁵ Since then even

though extensive manufacturing technological expertise was available with the company, it was not able to capitalise on it as evidenced by the Ukrainian –Saudi Arabian joint venture to manufacture An-132 aircraft in Saudi-Arabia but with a Pratt & Whitney (P&W) supplied aero-engine.⁶

In 2014, the Chinese exploited the opportunity and stepped in with the Beijing based company Skyrizon. The company shares were bought along with a promised investment of over \$250 million in Motor Sich's Ukrainian plants.⁷ This Chinese concern with a possible state supported mechanism which is likely to include facilitation agreements with countries such as Panama, have since then consolidated their holdings in the company. In order to meet the envisaged targets they would have now tried to hasten their acquisition of aero-engine manufacturing expertise, including tooling and machining facilities in order to move them out of the Ukrainian plants to mainland China.

This move is significant as many of the Chinese designed aircraft such as the Y-20 and the Advanced Heavy Lift (AHL) Helicopter programme (designed by Russia on specifications and funding by China) would require a type of power plant readily available with Motor-Sich. During an air show in 2016 held in China⁸ it was announced that the AHL helicopter would be powered by the Motor-Sich D-136 engine.⁹

The North-Korean Tangle

Recent missile tests and the belligerence shown by North Korea have resulted in a focus being shifted to the suppliers of the technology. An article published on line in New York¹⁰ times quotes classified assessments by American intelligence agencies as stating that the powerful rocket engines used onboard the missiles were supplied by the Ukrainian 'Production Association Yuzhny Machine-Building Plant or PA Yuzhmash, which is a state-owned aerospace manufacturer and part of the State Space Agency of Ukraine (SSAU) and was a key missile producer for Soviet ICBM and space exploration programs.¹¹ Even though this linkage has been denied by Ukraine saying it has never supplied any technology to North Korea,¹² however links between the Chinese concerns through the offshore companies may have pointed in the direction.

The reports are indicative of an ongoing international investigation and scrutiny of the dealings by the Ukrainian firms who have the necessary technology but are finding increasingly difficult to sell them in the largely market driven world and are therefore compelled to transfer their technology for a relatively low price.

Did the Chinese Act in Haste?

The revelation of a single Chinese national holding over 56 percent of stake in Motor-Sich

would be significant to the Ukrainian authorities, even if it is as per the accepted trading practices worldwide. Of a greater concern would be the Chinese attempt to shift the entire aero-engine production line to China along with tooling and testing facilities which prompted the investigation and the court order. Of interest now, would be whether the Beijing Skyrizon's promise of investing \$250 million in Motor Sich's Ukrainian plant would actually materialise.

The Chinese attempts to cover the gaps in its aero-engine manufacturing expertise will continue. Even though this step may have been taken in haste and could have been revealed during a wider investigation into the North Korea and Yuzhmash connection, the possible adverse impact on the actual aero-engine technology transfer to China will be revealed in due course. Importantly, it once again reveals to the world the "Chinese" way of conducting international business in an attempt to obtain critical military technologies.

(Disclaimer: The views and opinions expressed in this article are those of the author and do not necessarily reflect the position of the Centre for Air Power Studies [CAPS])

Notes

¹Reuben F Johnson, "Ukraine's Motor Sich raided", Janes 360, (August 03,2017), <http://www.janes.com/article/72840/ukraine-s-motor-sich-raided> accessed on September 20,2017

² KyievPost, "SBU investigating sale of controlling stake in Motor Sich, seizes 41 percent of shares via court", Interfax-Ukraine (September 11,2017)

<https://www.kyivpost.com/ukraine-politics/sbu-investigating-sale-controlling-stake-motor-sich-seizes-41-percent-shares-via-court.html> accessed September 20,2017

[northkorea-missiles-ukraine/ukraine-denies-selling-missile-technology-to-north-korea-idUSKCN1AU1C9](http://www.kyivpost.com/ukraine-politics/sbu-investigating-sale-controlling-stake-motor-sich-seizes-41-percent-shares-via-court.html) accessed on September 20, 2017

³ Interfax-Ukraine, “Motor Sich says seizure of shares doesn't affect its work”,

<http://en.interfax.com.ua/news/economic/448012.html> accessed on September 20, 2017

⁴ MotorSich, “Company History”, <http://www.motorsich.com/eng/profile/history1/> accessed September 20,2017

⁵ Eurasian Times, “Ukraine-EU Agreement: How Beneficial is Ukraine-EU Agreement?”, <https://eurasianimes.com/ukraine-eu-agreement/> accessed on September 20,2017

⁶ Arab News, “New Saudi-Ukrainian airplane test-flown successfully” <http://www.arabnews.com/node/1078356/saudi-arabia> accessed on September 20,2017

⁷ Sputniknews, “Trouble in Paradise? Chinese-Ukrainian Aircraft Engine Cooperation Under Threat” <https://sputniknews.com/analysis/201709161057451059-ukraine-china-military-cooperation-problems/> accessed on September 20,2017

⁸ Janes.com, “Airshow China 2016: Ukraine's Motor Sich to begin licensed production in China”

<http://www.janes.com/article/65323/airshow-china-2016-ukraine-s-motor-sich-to-begin-licensed-production-in-china> accessed on September 20,2017

⁹ Russia Aviation Insider, “Ukraine starts testing improved engine for heavy helicopters”

<http://www.rusaviainsider.com/ukraine-starts-testing-improved-engine-for-heavy-helicopters/> accessed on September 20, 2017

¹⁰William J. Broad And David E. Sanger, “North Korea’s Missile Success Is Linked to Ukrainian Plant, Investigators Say”, <https://www.nytimes.com/2017/08/14/world/asia/north-korea-missiles-ukraine-factory.html> accessed on Sep 20,2017

¹¹ Epicos.com, “Industry Directory- Yuzhmash”, <http://www.epicos.com/company/124532/pa-yuzhmash> accessed on Sep 20,2017

¹² Reuters, “ Ukraine denies selling missile technology to North Korea”, <https://www.reuters.com/article/us->