

The Korea Times

*** CITY EDITION

Established 1950, No. 22550

www.koreatimes.co.kr

TUESDAY, FEBRUARY 13, 2024

Dongwha

www.dongwha.com



9 Korean version of NASA

Will new agency propel nation into emerging space power?

Nationwide 24-hour retransmission
1588-2001
Available in-flight
KOREAN AIR

Will new agency propel Korea to emerging space power?

By Baek Byung-yeul
baekby@koreatimes.co.kr

Korea is set to launch a new space agency, the Korea Space Administration (KASA), in May, following the passing of a special act for its establishment at the National Assembly on Jan. 9. The agency, which will be responsible for all aspects of space, including setting a vision, technology development and global cooperation, is expected to play a pivotal role in propelling Korea toward becoming an emerging space power, according to industry officials and experts.

Experts highlighted that one of the main tasks that the Korean version of NASA should focus on is ensuring that space development is very well interconnected with the development of related industries, thereby benefiting the national economy.

While the agency will be launched with high expectations, there are also issues to be resolved beforehand, they added. One of the issues is how to secure enough personnel to begin the full operation of the agency. The fact that Sacheon in South Gyeongsang Province, where the agency will be located, is about 300 kilometers away from Seoul, makes it difficult to attract skilled workers to the aerospace sector.

Paul Yun, NASA's solar system ambassador, said that the newly launched space agency will focus on coordinating Korea's space industry and technology development, coordination among government ministries and international cooperation.

"The space agency needs to establish regular strategies for space exploration, space science and space technology related to the Korean space sector and organically connect with various government ministries, companies, research institutes and universities," he said. "It also needs to create and execute a collaboration structure with space agencies of each country and international cooperation organizations and coordinate them."

The NASA ambassador noted that the current trend in space development is to move away from the era when space development was conducted with national security in mind during the Cold War. Instead, it is now being carried out for national economic development.



The South Gyeongsang Provincial Government celebrates the National Assembly's passage of a special law to establish the Korea Aerospace Administration by installing the words "Congratulations, KASA special law passed" on a mock-up of a Nuri space launch vehicle at the provincial office's headquarters in Changwon, South Gyeongsang Province, Jan. 12.

Courtesy of South Gyeongsang Province

Therefore, he advised KASA to steer toward rejuvenating the national economy through the space industry. "Korea and its companies have been conducting economic activities mainly based on Earth. With the expansion of the space economy, KASA should establish a long-term strategy to expand and develop into space," the NASA ambassador said.

The government is well aware of this and has declared that KASA will foster 500,000 jobs and 2,000 related companies in the space industry by 2045. They also aim to dramatically increase investments in the space aviation industry to achieve a 10 percent share in the global space market.

Based in Sacheon, the space agency will be launched on May 27, or May 29 at the latest, according to the science minister.

"Considering the timing of the enactment and implementation of the law regarding the establishment of the agency, the calculation is that it can be as early as May 27. We plan to finalize the opening of the space agency by May 29 at the latest," Science Minister Lee Jong-ho told reporters during a press conference on Jan. 11 in Seoul.

The minister said that the budget for the space agency this year is expected to be around 800 billion

won (\$600 million), and the head of the space agency will be appointed by President Yoon Suk Yeol as KASA is an external agency of the science ministry.

Kang Goo-young, CEO of Korea Aerospace Industries (KAI), has consistently argued for the necessity of establishing a space agency, which will play the role of a control tower for the development of Korea's aerospace industry. After the special act for the establishment of KASA passed on Jan. 9, he said, "I congratulate the establishment of a control tower that can promote a new aerospace led by the private sector."

Kang, who also serves as chairman of the Korea Aerospace Industries Association (KALIA), said, "The association will also contribute to the urgently needed policy promotion, budget securing and system improvement for the development of the Korean aerospace industry."

Securing adequate workforce becomes urgent challenge

One of the urgent issues that experts point out that KASA needs to resolve before its launch at the end of May is securing enough workers. The government has stated that KASA will be an organization com-

posed of 300 personnel.

However, experts noted that the pool of aerospace industry-related experts in the country is not large, and that the agency needs to come up with more inducements to attract workers, especially young researchers, since the headquarters of KASA is far away from major cities.

The science ministry said that the KASA personnel will consist of 200 researchers and 100 administrative public officials, totaling 300 people. The researchers will be composed of domestic and foreign experts.

The government's decision to locate KASA's headquarters in Sacheon was due to the industrial location of the city. KAI, which manufactures fighter jets and multipurpose satellites, already has its headquarters and factory located there, and to the west of Sacheon is Goheung, where the Naro Space Center — which launched Korea's first space launch vehicle — is located.

"There doesn't seem to be a lot of aerospace-related researchers in Korea, so it seems that KASA may have difficulty in recruiting related personnel," a researcher of a local space-related institute said on condition of anonymity.

The researcher said that while KASA may recruit researchers from



Science Minister Lee Jong-ho speaks about the establishment of the Korea Aerospace Administration at the Government Complex Seoul, Jan. 11.

Yonhap

state-run aerospace agencies like the Korea Aerospace Research Institute (KARI) or the Korea Astronomy and Space Science Institute (KASI) in preparation for its launch, he questioned whether there would be any factors to make those working at state-run agencies, mostly located in Daejeon which is one of Korea's major cities, go all the way to Sacheon.

"The fact that Sacheon is far away from major cities like Seoul will be the biggest hurdle. Although transportation has developed a lot, it is a fact that it is a major stumbling block to attracting young researchers," the researcher added.

Data from the Korea Association for Space Technology Promotion shows that as of 2022, there were 10,125 space-related personnel in Korea, but 7,501 of them, or about 75 percent, were employed in companies. It is also questionable whether KASA can offer better incentives than companies that offer relatively high salaries.

In response to a question about the difficulties in securing personnel, the science minister said, "Sacheon is the region where the space aviation-related industrial ecosystem is best built in Korea. It is cited as one of the three axes of the space industry cluster. Currently, discussions have begun with the South Gyeongsang Provincial Government and Sacheon City Government. In particular, I am aware that there are plans to support the local government in the areas of housing and transportation."

Experts also pointed out that the government needs to put efforts into

expanding the pool of professionals in the aerospace sector in the long run.

"Securing 200 researchers for KASA is not an easy task," Lee Sang-ryook, president of KASA, said during a press conference on Jan. 18. "Rather than perfectly matching the launch of KASA in May, it is necessary to proceed with a plan to gradually gather excellent professionals."

In regards to cooperation with global space agencies, Korea has been especially increasing cooperation efforts with NASA as the U.S. space agency's ShadowCam equipment is installed on the Danuri lunar orbiter and they have been collaborating on observing permanently shadowed areas on the moon's south pole.

The science ministry said the new space agency will continue to cooperate with NASA after its establishment.

On Jan. 29, the ministry announced that Vice Science Minister Cho Seong-kyung recently met with NASA's Deputy Administrator Pamela Melroy to discuss how the two countries could specifically cooperate in the long term on the Artemis moon exploration program led by NASA.

During the meeting, the two sides agreed to consider applying mobility, secondary batteries, 5G network, autonomous driving and nuclear technology to space exploration, and to examine lunar rovers and the construction of a lunar communication network as long-term cooperation plans.