

**ONN Monitoring Report**  
**New Construction at the Tonghae Satellite Launching Ground**

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**Summary**

The Tonghae Satellite Launching Ground is the oldest carrier rocket and ballistic missile launch site of the Democratic People's Republic of Korea (DPRK). Recent commercial satellite images of this site reveal that new construction took place in March 2021 at a location in between the two launch complexes of the launching ground (one previously used for launches and the other unfinished).

The nature of the new construction at the Tonghae Satellite Launching Ground remains unclear. However, the construction might suggest that the DPRK continues to have future plans for this site, which is assessed to have been in a dormant state since 2013/2014.

**Overview of the Tonghae Satellite Launching Ground**

The Tonghae Satellite Launching Ground was used by the DPRK for its early space/long-range rocket launches in 1998, 2006 and 2009.<sup>1</sup> An expansion project to build another launch complex consisting of a launch pad, gantry tower and supporting facilities (Figure 1, location 4) and suspected rocket assembly and control/administrative buildings (Figure 1, location 5) was initiated in 2011, but construction to date at those locations remains unfinished.<sup>2</sup> The Launching Ground is believed to be in caretaker status.<sup>3</sup>

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<sup>1</sup> The subsequent space launches in 2012 and 2016 were carried out at the Sohae Satellite Launching Station. "Tonghae" means East Sea, "Sohaе" means West Sea.

<sup>2</sup> Some buildings were also constructed next to the suspected control/administrative building between spring 2018 to November 2020 (see Figure 2).

<sup>3</sup> Joseph Bermudez and Victor Cha, *December 2019 Update: Tonghae Satellite Launching Ground*, Center for Strategic and International Studies, 17 December 2019, available at: <https://beyondparallel.csis.org/december-2019-update-tonghae-satellite-launching-ground/>

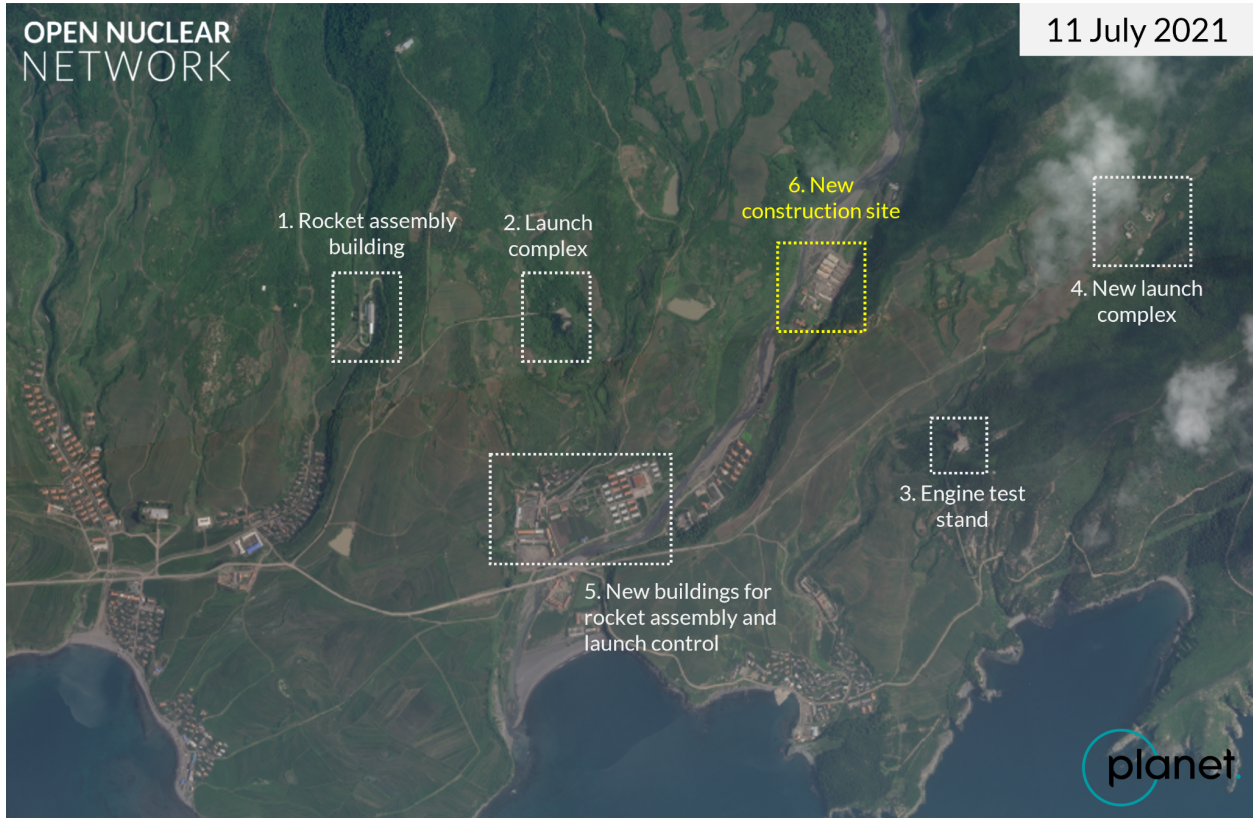


Figure 1: Planet image taken on 11 July 2021 of the Tonghae Satellite Launching Ground. The site includes the following main structures: (1) rocket assembly building, (2) launch complex, (3) engine test stand, (4) a launch complex that remains unfinished, and (5) buildings believed to be for rocket assembly and launch control/administration that remain unfinished. The location marked as 6 (in yellow) is where new construction has taken place.

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Figure 2: Satellite images of location 5 taken in April 2018 (left) and on 4 November 2020 (right) show that multiple buildings next to the suspected launch control/administrative building (square-shaped building) were built during this period. Images: Google Earth (left); © 2021 Planet Labs Inc. All Rights Reserved. Reprinted by permission (right).

## New construction activities

As shown in Figure 1, new construction has taken place at a location between the completed and unfinished launch complexes, 630 meters northwest of the engine test stand and about 800 meters northeast of the unfinished, suspected horizontal assembly and launch control buildings.



*Figure 3: Buildings at location 6 were partially demolished between March 2013 (left) and November 2013 (right).  
Images: Google Earth*

As shown in Figure 3, buildings at location 6 were partially demolished between March 2013 and November 2013. This location remained unchanged until March 2021, when new construction was initiated at the place of the partially demolished buildings. The construction site consists mainly of eight structures, each of which covers an area of 30 meters by 10 meters. The latest Planet image (Figure 4), taken on 11 July 2021, shows steady progress at the construction site.

The nature of these new construction activities is unclear. The structures under construction could serve carrier rocket or ballistic missile projects (e.g. logistical support) or, as the exact boundaries of the Launching Ground are not entirely clear, agricultural or other civilian purposes. ONN will continue to monitor the developments at the launching ground.

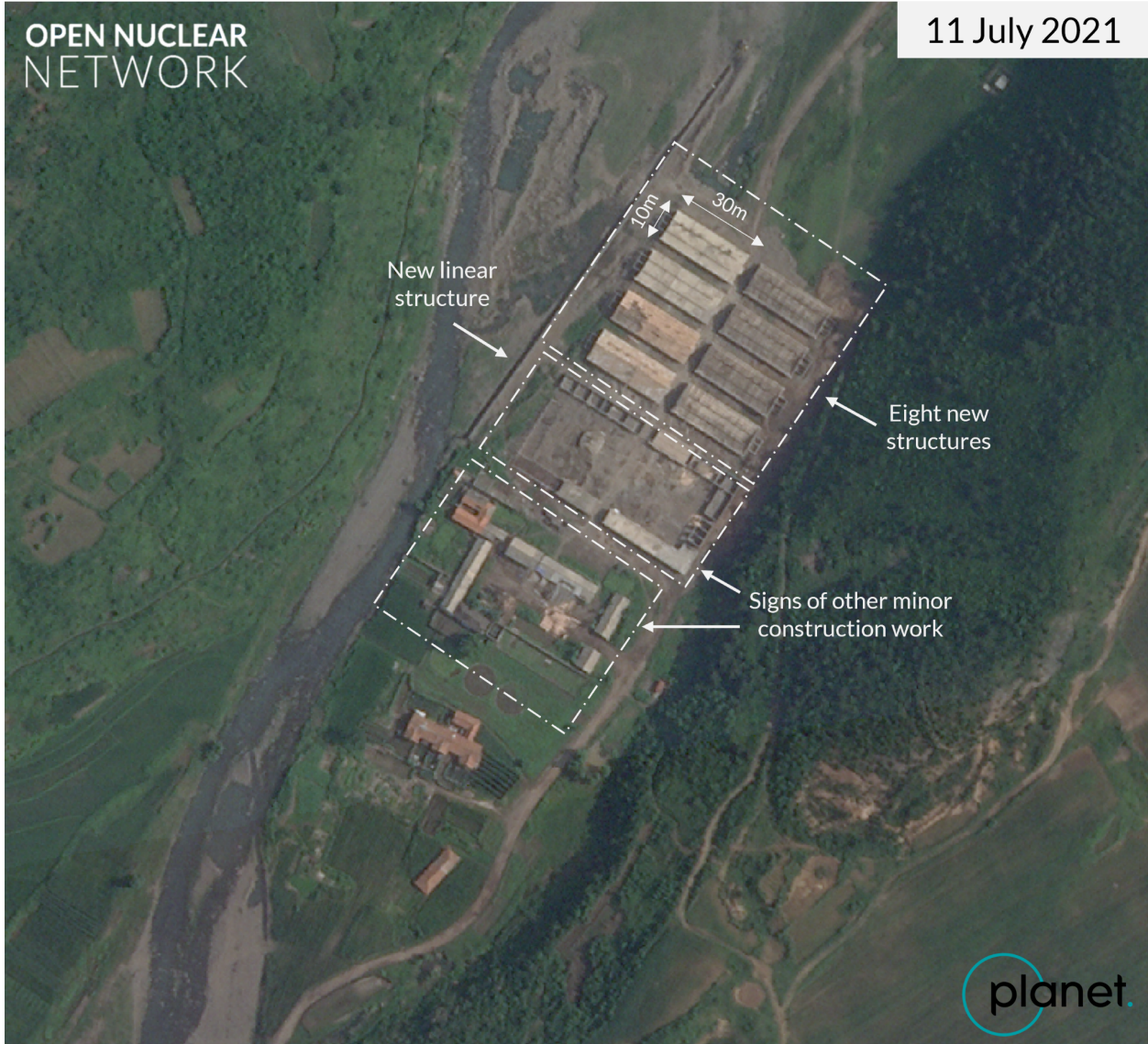


Figure 4: Satellite image taken on 11 July 2021 shows steady progress at the construction site at location 6.  
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