

## **MOD's final statement regarding the incident of an ROK naval vessel directing its fire-control radar at an MSDF patrol aircraft (Provisional Translation)**

### **Introduction**

The Ministry of Defense (MOD) has made endeavors in the past for close communication to take place between the defense authorities of Japan and the Republic of Korea (ROK), and in this spirit, regarding the current issue concerning the fire-control radar irradiation by an ROK destroyer, a series of consultations have been held between Japan and the ROK. However, it is extremely regrettable that even today, the difference between the respective understandings regarding major issues, including whether or not there was an irradiation of fire-control radar, is not yet resolved.

The MOD takes this incident seriously, and in light of firmly seeking for prevention of recurrence, has decided to summarize and make publicly available the objective facts that are possessed by the Japanese side.

We hope that this announcement will lead to the prevention of similar incidents in the future.

### **1. Regarding the fire-control radar irradiation**

Because Japan is surrounded by wide sea space, in order to respond to a variety of contingencies in a timely and appropriate manner, and to assure the protection of the lives and property of the people as well as territorial land, water and airspace, during peacetime, the MOD is engaged in persistent intelligence collection and warning and surveillance of foreign vessels conducting activities in Japan's surrounding waters.

As shown in the footage released by the MOD on December 28, 2018, on December 20, around 3PM, an MSDF P-1 patrol aircraft was flying within Japan's exclusive economic zone (EEZ) in the Sea of Japan as part of ordinary intelligence collection and warning and surveillance activities when it observed an ROK destroyer and an ROK patrol and rescue vessel. While photographing the said vessels, the P-1 was suddenly irradiated

by a fire-control radar from the ROK destroyer. The MSDF P-1 immediately took actions to ensure safety.

Fire-control radars are directed at its target immediately before firing, and to aim it at foreign aircrafts without a rational reason is an extremely hazardous act that may cause unintended consequences.

According to CUES (Code for Unplanned Encounters at Sea), a code adopted in 2014 by navies from 21 countries including Japan and the ROK, aiming fire control radars is considered a simulation of attack, and is stipulated as an action a commander might avoid.

In response to the occurrence of a serious incident of such nature, the MOD lodged a strong protest and requested the prevention of recurrence to the ROK. However, not only did the ROK deny the fact this incident occurred, their actions regarding the incident entirely focus on demanding Japan to “stop distorting facts” and “apologize for conducting a threateningly low-altitude flight”.

Upon careful and meticulous analysis by the MOD’s specialized unit of the frequency, intensity, waveform, etc. of the radar waves directed at the MSDF P-1, the MOD has confirmed that the P-1 was continuously irradiated for a certain period, multiple times by the fire-control radar (STIR-180) of the ROK destroyer that was being photographed. The STIR-180 was not mounted on the patrol and rescue vessel that was nearby at the time, and the fact the ROK destroyer directed its radar is clear from the footage released by the MOD on December 28, 2018.

The MOD has decided publicly disclose at the Ministry’s website, upon processing for information security, the data of the radar waves converted to sound that the P-1 patrol aircraft crew heard in flight, as further evidence of the irradiation of the fire-control radar.

In general, fire-control radars continuously direct radar waves to its target in order to obtain the target’s location, speed etc. to fire missiles and ammunition with precision. The data collected from the fire-control radar, such as wave forms, is clearly different from that of a surface search radar, which searches/detects targets in surrounding areas by emitting radar waves while rotating its head. Therefore, by analyzing the emitted radio waves, it is

possible to determine its type and source of emission. The radio waves directed at the MSDF P-1 had shown characteristics unique to that of fire-control radars.

Although it is apparent from the result of MOD's analysis that this radar wave was emitted by the ROK destroyer being photographed by the MSDF P-1, for the objective and neutral determination of these facts, it is necessary that a comprehensive assessment is made upon comparison of Japan's data regarding the radar waves it has detected, and the ROK's data regarding the detailed capability of the fire-control radar equipped on the ROK destroyer, based on the principle of reciprocity.

In this light, at the working-level meeting held on January 14, 2019, the MOD proposed a joint verification of data based on the principle of reciprocity, by comparing the factual evidence of the incident such as the detected radar waves and its sound conversion, to the ROK radar's capabilities and record of use. However, this proposal was rejected. The MOD had made a proposal of the same intent during the working-level meeting held on December 27, 2018. In addition, the MOD also brought the data of the sound conversion of the detected radar waves, as evidence to contribute to the verification of facts, to the meeting on January 14 and proposed to have the ROK listen to it there, but this proposal was also rejected.

On the following day, January 15, the spokesperson of the ROK's Ministry of National Defense denounced the MOD's proposals as "extremely rude", an expression that is diplomatically rare, and, in violation of the agreement made between Japan and the ROK ahead of the meeting, one-sidedly disclosed information contrary to facts regarding the content of the meeting. These comments by the ROK spokesperson undermine the relationship of mutual trust and hinder the candid exchange of views. It is extremely regrettable that such actions were taken, and on the 16<sup>th</sup>, the MOD firmly requested that such actions never recur. However, the ROK has failed to provide a sincere response.

Taking into account the series of actions by the ROK and the fact that the ROK's claims have lacked both consistency and credibility, there is no choice but to conclude that the ROK has been repeating claims that by all means differ from truth.

In such a situation, an objective and neutral determination of facts based on the principle of reciprocity must be deemed difficult, and it is unlikely that the truth will ever be made clear even if working-level meetings were to continue to be held. The MOD once again strongly protests against the ROK destroyer's fire-control radar irradiation, and strongly urges the ROK to accept that this incident occurred and conduct thorough measures to prevent the recurrence of such event.

## **2. Regarding other claims made by the ROK**

### **(1) Regarding the flight by the MSDF P-1**

The ROK claims that the MSDF P-1 conducted "a threateningly low-altitude flight" in the vicinity of a ROK destroyer conducting a "humanitarian rescue mission", and is demanding an apology.

There is no international law that directly regulates the minimum safety altitude for military aircrafts, but in order to ensure safety, the MSDF operates under Japan's domestic law that conforms to the Convention on International Civil Aviation, and did not conduct any flight that may threaten the ROK destroyer. It is our understanding that normal operations by the U.S. Forces and NATO are carried out under similar standards.

In fact, as apparent from the footage released by the MOD on December 28 and the MSDF P-1's track chart, the MSDF P-1 maintained a sufficiently safe altitude (approx. 150m) and distance (approx. 500m) from the ROK destroyer even at its closest, and did not conduct flight that may interrupt the ROK destroyer's activities. In addition, because the ROK destroyer did not respond to the P-1's call outs by radio communication, the MSDF P-1 was unable to recognize that the ROK was conducting rescue activities.

No evidence to support the ROK's claim can be found in the ten-second footage released by the ROK of what seems to be the MSDF P-1 patrol aircraft filmed from the ROK patrol and rescue vessel, and no other objective evidence to support the ROK's claim that the MSDF P-1 conducted "a threateningly low-altitude flight" has been presented.

Even prior to this incident, the MSDF has conducted similar flights and has

photographed vessels when observing not only Korean but other foreign vessels during its intelligence collection and warning and surveillance activities. Since April 2018, the MSDF has photographed the exact same ROK destroyer “Gwanggaeto-daewang” destroyer three times (April 27, April 28 and August 23), but the ROK did not express its concern regarding these flights.

The MOD had requested additional objective evidence to support the ROK’s claim at the working-level meetings, but the ROK has failed to provide such evidence, and has repeatedly responded with claims that entirely lack in objectivity, such as “if the subject of the threat feels threatened, it is then a threat”.

For these reasons, the MOD has concluded that the ROK’s claim lacks both persuasiveness and support from factual evidence, and was made to dilute other important issues regarding the fire-control radar incident.

## **(2) Regarding communication conditions**

In general, naval vessel crew will call out by radio communication when feeling threat, but the ROK destroyer, despite seeing the MSDF P-1 aircraft’s flight as a problem, had not taken measures by any means to call out to the P-1 about its concern.

In addition, after being irradiated by the fire-control radar, the MSDF P-1 patrol aircraft had called out using three frequencies in international VHF (156.8MHz) and emergency frequencies (121.5MHz and 243MHz), but there was no response at all from the ROK destroyer.

Regarding this issue, the ROK has explained that the destroyer did not respond because the communication condition on site was poor, and they were unable to catch most of the call outs from the aircraft and thought they heard the phrase “KOREA COAST”. In addition, the ROK also explained that the communication equipment on board was not tuned to be able to hear one of the three frequencies.

However, the weather conditions on site that day was sunny with very few clouds, and communication conditions were extremely good. In addition, the MSDF P-1 used the

same radio communication equipment (it has been confirmed that this equipment was operating normally before, during, and after flight) used to call out to the ROK destroyer to communicate with on-land stations in Saitama Prefecture, and it has also been confirmed that an ASDF training aircraft flying at a location approximately 240 km away from the P-1 heard the call out made by the P-1 to the ROK destroyer.

It is improbable under normal circumstances that radio communication could not be clearly received in such good communication conditions, and in the footage released by the ROK, the call out from the P-1 to the ROK destroyer can be clearly heard (“KOREAN SOUTH NAVAL SHIP, HULL NUMBER 971, THIS IS JAPAN NAVY.”) Considering this point, at the working-level meeting on January 14, the ROK explained for the first time that, upon repeated inspection of the call out from the MSDF P-1 patrol aircraft, it was later found that the communication personnel had misheard the radio communication. Prior to this, the ROK had never disclosed this information in its press conferences and had only explained that the destroyer did not respond because they heard “KOREA COAST”.

The MOD strongly calls for the ROK to take measures to improve communication between Japan-ROK defense authorities on site, such as conducting appropriate communication to JSDF aircrafts, improving conditions of communication reception, and conducting education/training to communication personnel, so that such incidents never recur.

### **3. Path forward**

For the above reasons, the MOD once again strongly protests against the ROK destroyer’s fire-control radar irradiation, and strongly urges the ROK to accept that this incident occurred and conduct thorough measures to prevent its recurrence.

At the same time, given that the ROK refuses to conduct an objective and neutral determination of facts based on the principle of reciprocity, and thus it is unlikely that the truth will ever be made clear even if working-level meetings were to continue, the MOD deems that it has become difficult to continue to hold consultations with the ROK

regarding this matter.

That being said, our stance remains unchanged in that the Japan-ROK and Japan-ROK-U.S defense cooperation is extremely important, and is indispensable in confronting security challenges such as the nuclear and missile issue in North Korea and maintaining the stability of the security environment in East Asia. We hope that this announcement will lead to the prevention of similar incidents in the future, and we will continue to make sincere efforts towards continuous Japan-ROK and Japan-ROK-U.S defense cooperation.