MOD's final statement regarding the incident of an ROK naval vessel directing its fire-control radar at an MSDF patrol aircraft

【Reference Material】

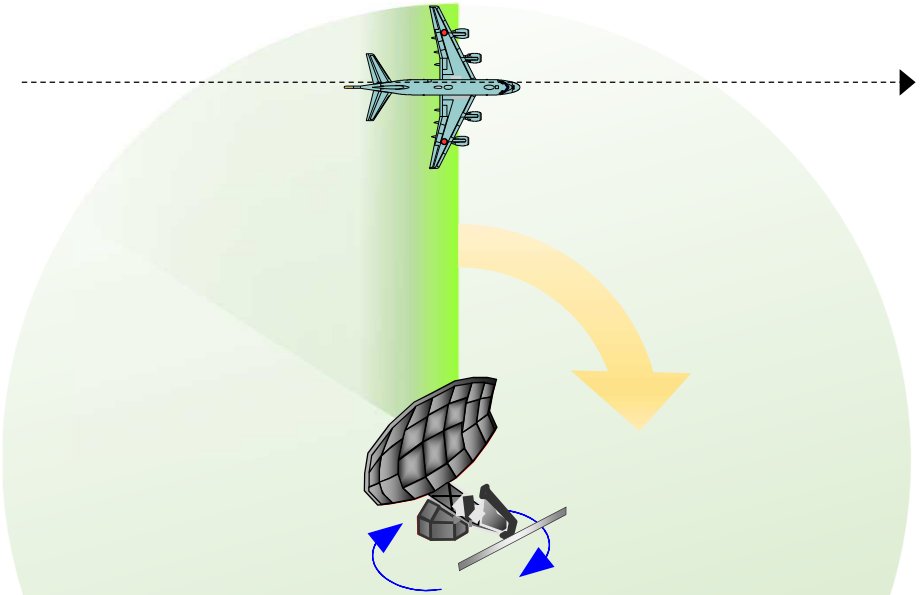
(Provisional Translation)

January 2019

Ministry of Defense

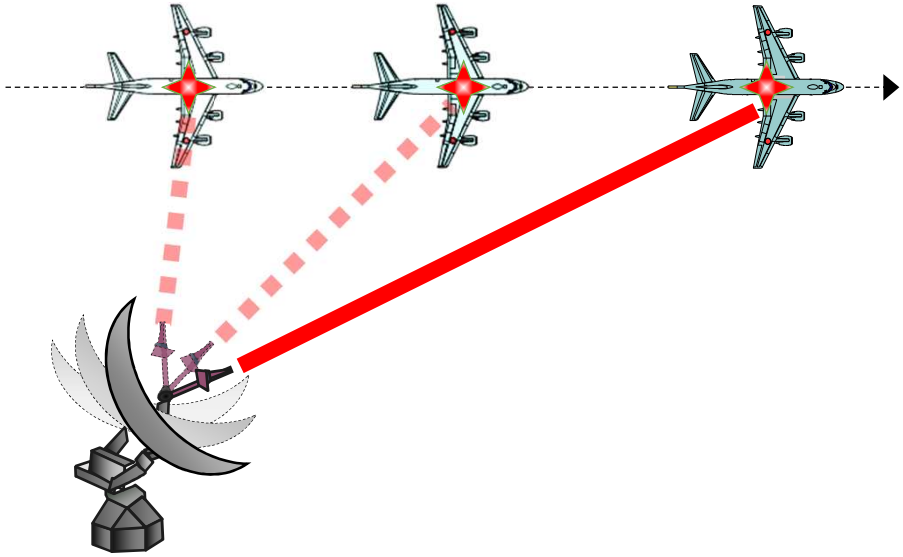
Types of Radars and Their Characteristics （1/2）

Surface Search Radar



Searches/detects targets in surrounding areas by emitting radar waves while rotating

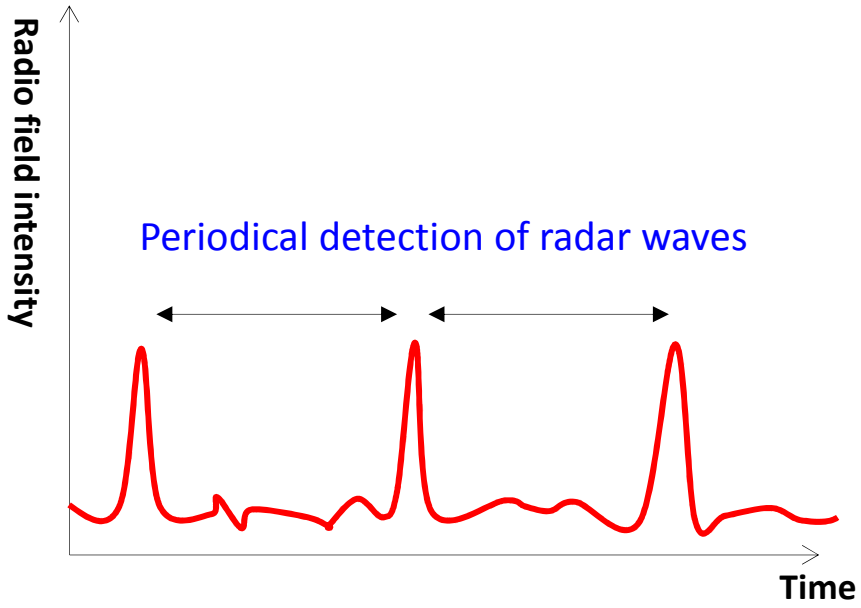
Fire-control Radar



Continuously directs radar waves to target to obtain the target's location, speed, etc. for precise firing of missiles and ammunition

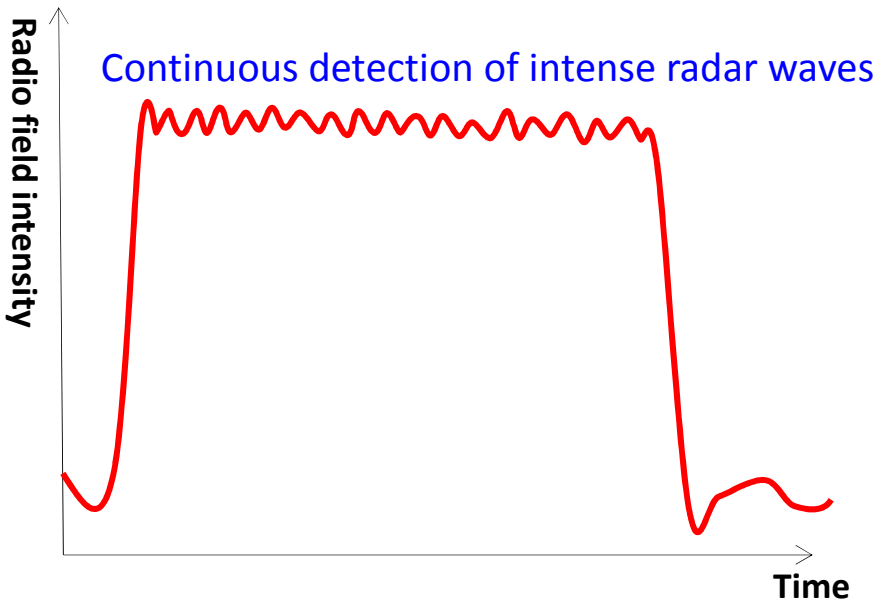
Types of Radars and Their Characteristics （2/2）

Surface Search Radar



Search radar waves converted to sound

Fire-control Radar



Fire-control radar waves directed at the P-1 by an ROK naval vessel converted to sound

※ Parts of the sound are processed for information security

※This sound data is available at the MOD website（http://www.mod.go.jp/j/press/news/2019/01/21x_eng.html）

MOD's Evaluation of Fire-control Radar Irradiation by an ROK Destroyer

Upon careful and meticulous analysis of the frequency, intensity, waveform, etc. of the radar waves directed at the P-1, the MOD has confirmed that the P-1 was continuously irradiated for a certain period, multiple times by an ROK vessel's STIR-180.
The STIR-180 is not mounted on the patrol and rescue vessel that was nearby at the time.

CUES（Code for Unplanned Encounters at Sea）

2.8 Assurance Measures for Naval Ships

2.8.1 Because nations may under international law grant their naval and aviation units the authority to respond with force to actions they perceive to reflect hostile intent, Commanding Officers or Masters (as applicable) need to consider the potential ramifications before engaging in actions which could be misinterpreted. Actions the prudent commander might generally avoid include:

a) Simulation of attacks by aiming guns, missiles, fire control radars, torpedo tubes or other weapons in the direction of vessels or aircraft encountered.

According to CUES, a code adopted 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 the prudent commander might generally avoid.

Overview of P-1 Flight（1/2）

④ Flight from the stern to the starboard side of the ROK destroyer

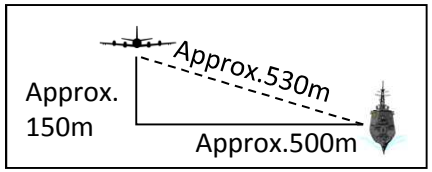
③Right turn and gradual descent to approx. 150m to observe the ROK destroyer

②Flight past the stern of the ROK destroyer (Altitude: approx. 230m, distance: approx. 500m)


ROK Destroyer


ROK Patrol and Rescue Vessel

⑤Flight past the abeam of ROK destroyer
（Closest altitude: approx. 150m, closest distance: approx. 500m）



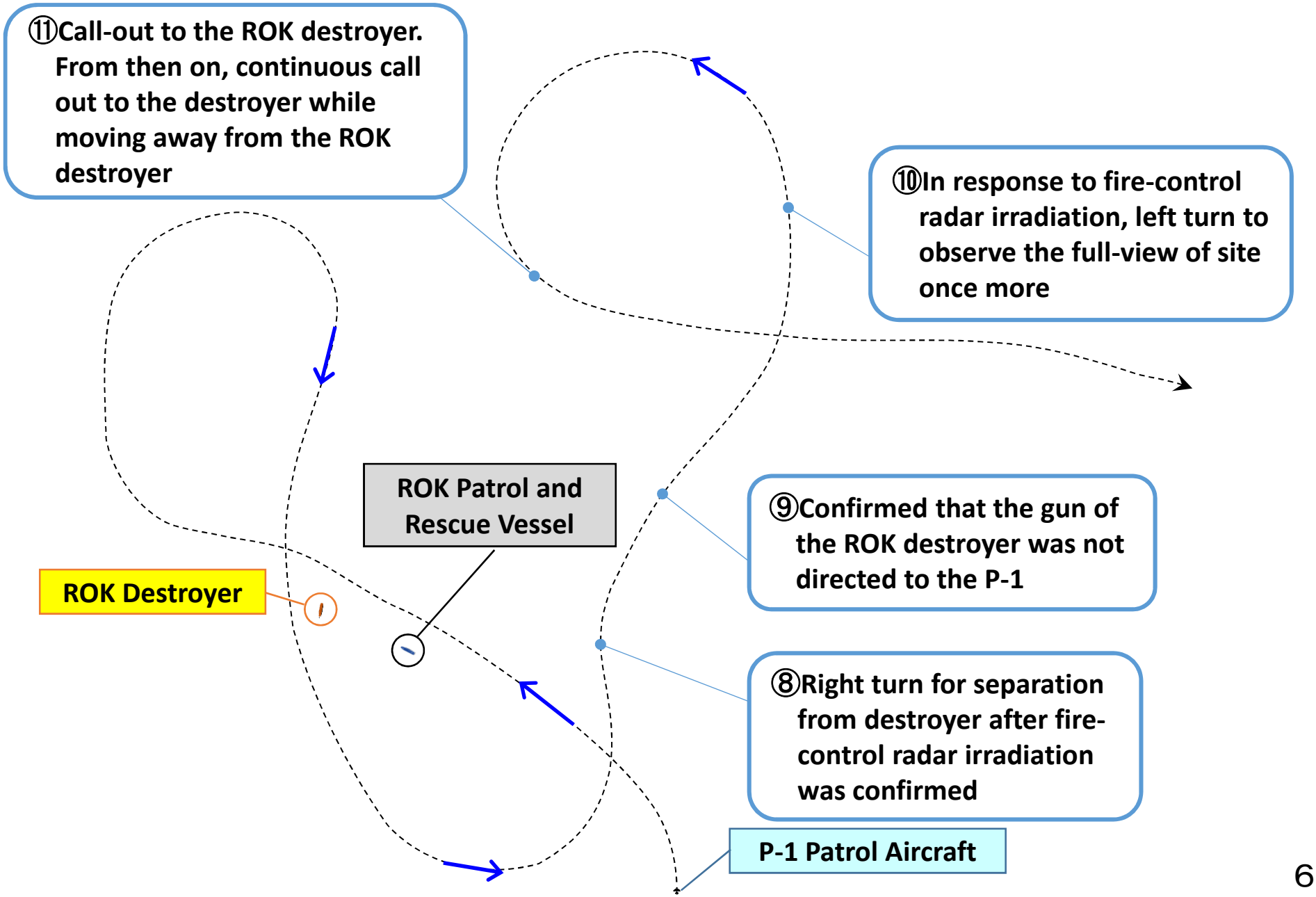
①Flight from the stern to the starboard side of the patrol and rescue vessel to observe the vessel

P-1 Patrol Aircraft

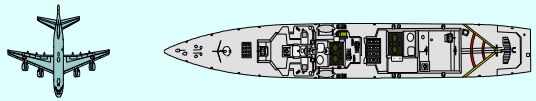
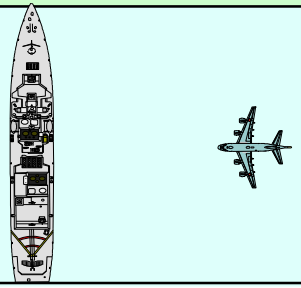
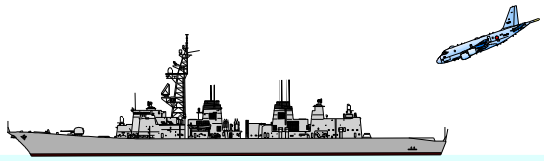
⑥The distance from the vessel at the when flying past the bow of the ROK vessel was approx. 1,100m

⑦Gradual left turn to observe the full-view of the site

Overview of P-1 Flight （2/2）



Examples of Flight Patterns the JSDF Generally Avoids

	Crossing in frontal vicinity of vessel	Flying towards vessel	Simulation of attack near vessel
Image			
Overview	Crossing in frontal vicinity of a vessel that may force the vessel to change its course/speed	Flying towards a vessel that will result in the aircraft flying directly above the vessel if the aircraft were to proceed with its course	・Aiming weapons such as guns and fire control radars ・Maneuvering simulation of machine gun firing/bombing ・Sudden dive etc
P-1's flight	The P-1 maintained approx. 1.1 km distance from the bow of the vessel, and its course moved away from the said vessel. Therefore, the P-1 did not crosscut in frontal vicinity of the vessel.	The P-1 at no point took a course that would pass directly above the vessel. Therefore, the P-1 did not fly towards the vessel.	The P-1 did not simulate attack near the vessel for the following reasons: ・The P-1 was not equipped with anti-ship missiles or fire-control radars ・Machine guns were not equipped, and the bomb door was closed during flight ・Constant altitude/speed was maintained in vicinity of the vessel ・It is obvious from the exchanges between P-1 crew members filmed in the footage released by the MOD that there was no intention to threaten the ROK vessel

The P-1 did not take any of these flight patterns

Past Flights around ROK Navy's Destroyer “Gwanggaeto-daewang” （Fiscal Year 2018）

Photo taken on April 27
Closest Distance
: approx. 500m
Altitude : approx. 150m

Photo taken on April 28
Closest Distance
: approx. 500m
Altitude : approx. 150m

Photo taken on August 23
Closest Distance
: approx. 550m
Altitude : approx. 150m

The ROK did not express its concern regarding these flights