



# AI and Military Decision-Making: When Warning Outruns Understanding

*Dennis Phua*



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## AI and Military Decision-Making: When Warning Outruns Understanding

*By Dennis Phua*

### SYNOPSIS

*As Artificial Intelligence (AI) becomes more integrated into military sensing, warning, and decision-support architectures, strategic stability may depend not only on ensuring that machines remain under human control, but also on ensuring that warning does not outrun understanding.*

### COMMENTARY

In May 2024, China conducted [Joint Sword-2024A](#) exercises around Taiwan shortly after President Lai Ching-te's inauguration. Taiwan reported significant Chinese air and naval activity, while regional governments monitored developments for signs of escalation.

The exercises prompted heightened monitoring, diplomatic signalling, and renewed attention to military readiness. Yet Beijing's intentions remained uncertain. Were the exercises political signalling, coercive demonstration, deterrent messaging, or preparation for conflict? Different interpretations remained plausible as governments considered how to respond.

### The Challenge of Warning Without Understanding

Such situations illustrate a recurring crisis-management problem: warnings often arrive before understanding is complete. States may feel pressure to take precautions before confidence in interpretation has matured. As AI becomes more integrated into military warning and decision support, the gap between warning and understanding may become strategically important.

This was not an AI crisis. It illustrates the environment into which AI-enabled warning and decision-support systems are entering. In the Taiwan Strait, South China Sea, and Korean Peninsula, governments already face pressure to detect activity quickly, interpret it amid uncertainty, and decide whether visible action is required. Faster warning may help, but it may also compress time for interpretation, consultation, and reassessment.

Military modernisation is increasingly integrating AI into warning and decision support. In 2024, AUKUS partners conducted trials under the [Resilient and Autonomous Artificial Intelligence Technologies initiative](#) to explore autonomous and AI-enabled military capabilities. The United States has continued developing the [Maven Smart System](#), which supports sensor-data fusion, object detection, tracking, and decision support. Singapore has expanded similar efforts through the [SAF C4 and Digitalisation Command](#), which incorporates the SAF AI Centre.

These initiatives integrate sensors, data, command systems, and decision-support tools more closely. The logic is compelling. Early warning can reduce surprise, enhance readiness, and give commanders more responsive options. The prevailing assumption is that early warning and better decision support strengthen strategic control.

### **Warning Versus Interpretation**

This assumption deserves scrutiny. Warning and interpretation are related but distinct. Sensors can detect unusual activity quickly. Information can be processed and fused rapidly. AI systems can classify patterns, flag anomalies, and generate response options in seconds. Strategic interpretation, however, remains harder to compress.

Leaders must still assess intentions, evaluate context, weigh competing explanations, coordinate with allies, and judge how their actions may be perceived. A military movement may indicate coercion, signalling, deterrence, precaution, domestic messaging, or preparation for conflict. AI may assist, but cannot eliminate judgement under uncertainty. This is not a new form of crisis instability, but a new pressure on an old one: accelerated warning systems may shorten the interval in which states can test interpretations before acting.

This matters because responding often requires less confidence than interpreting events. Leaders may conclude that failing to respond is riskier than limited precautionary action. A warning may therefore justify higher readiness, additional intelligence collection, alliance consultations, contingency planning, or public signalling before confidence in the interpretation has fully matured.

### **When Precaution Becomes Part of the Problem**

Such actions may be reasonable, but they can also become part of the crisis. A deployment meant to preserve flexibility may look like escalation preparation. Additional surveillance may be viewed as targeting preparation. Alliance consultations may reassure partners while convincing an opponent that a broader

coalition response is forming. Public statements may demonstrate resolve while reducing diplomatic flexibility.

The danger is not irrational action. It is that prudent precaution under uncertainty can change the situation being interpreted. Decision-makers may then react not only to the original concern but also to reactions triggered by their own measures. The deeper question is not simply whether warning systems are accurate, but whether they allow visible responses before leaders possess sufficient confidence about what events mean.

AI-enabled systems are entering crisis environments where warning, signalling, and precaution already interact amid uncertainty. Historical experience shows why reassessment windows matter. In 1983, [Soviet warning systems indicated a possible incoming missile attack](#), but the warning did not automatically trigger a counterattack decision.

In 1995, during the [Norwegian Rocket Incident](#), Russian leaders also had to assess whether a detected launch posed a genuine threat before responding.

These episodes occurred under different technological conditions and do not show that AI will produce similar crises. They do show that warning alone does not settle meaning and that time for reassessment can be strategically important.

Militaries and governments are not ignoring these challenges. [NATO's revised Artificial Intelligence Strategy](#) emphasises accountability, explainability, reliability, traceability, governability, and risk management. United States policy on autonomous weapon systems, reflected in [Department of Defense Directive 3000.09](#), requires appropriate levels of human judgement in the use of force.

### **The Limits of Existing Governance**

These efforts matter. They address reliability, accountability, governance, and human oversight. Yet they do not fully resolve the crisis-management problem here. Even reliable systems, responsible operators, and governance mechanisms may still generate pressure for visible action before interpretation matures.

Governments and militaries may therefore need crisis-management procedures, rules of engagement, and alliance consultation mechanisms that distinguish between internal alerting, reversible readiness, visible military movements, public signalling, and alliance commitments. Not every warning requires the same response. Some actions are internal or reversible. Others are visible, create commitments, or narrow diplomatic options before interpretation improves.

### **Conclusion**

Four questions should be asked before acting on an AI-enabled warning: Is the response visible to others? Is it reversible if later information changes the assessment? Does it create commitments that are difficult to unwind? Does it narrow future options before confidence in interpretation has matured?

These questions do not mean responses should always be delayed. In some crises, delay may pose unacceptable risks. Faster warning can strengthen deterrence, readiness, and operational effectiveness. The objective is not to slow warning systems, but to preserve opportunities for strategic reassessment.

Debates about military AI often focus on autonomy, machine error, and decision speed. These concerns are important. Yet another challenge lies elsewhere. As AI enters military sensing, warning, and decision-support architectures, strategic stability may depend not only on keeping machines under human control but also on ensuring that warning does not outrun understanding.

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*Dennis Phua will be commencing the Academic Year 2026 MSc Strategic Studies programme at RSIS, Nanyang Technological University. His work focuses on how strategic and institutional action remains viable under stress, especially where command, capability, infrastructure, decision systems and public responsibility come under pressure.*

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**S. Rajaratnam School of International Studies, NTU Singapore**  
Block S4, Level B3, 50 Nanyang Avenue, Singapore 639798

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