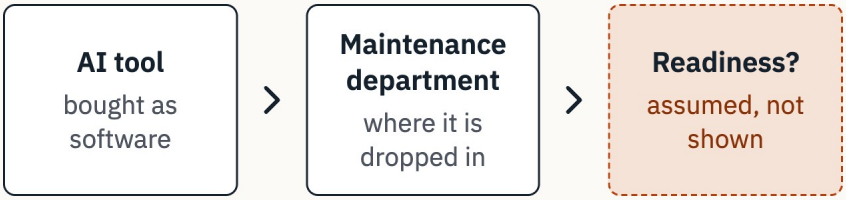
Buy the AI, hand it to the maintenance shop, and readiness will follow.



A RECENT NAVAIR DRAFT REQUEST REFLECTS THIS APPROACH

The Pentagon's instinct is that AI is a tool, and tools can be dropped into workplaces. The author's claim: this starts in the wrong place.

A valid argument on false premises is perfectly well formed and perfectly wrong.

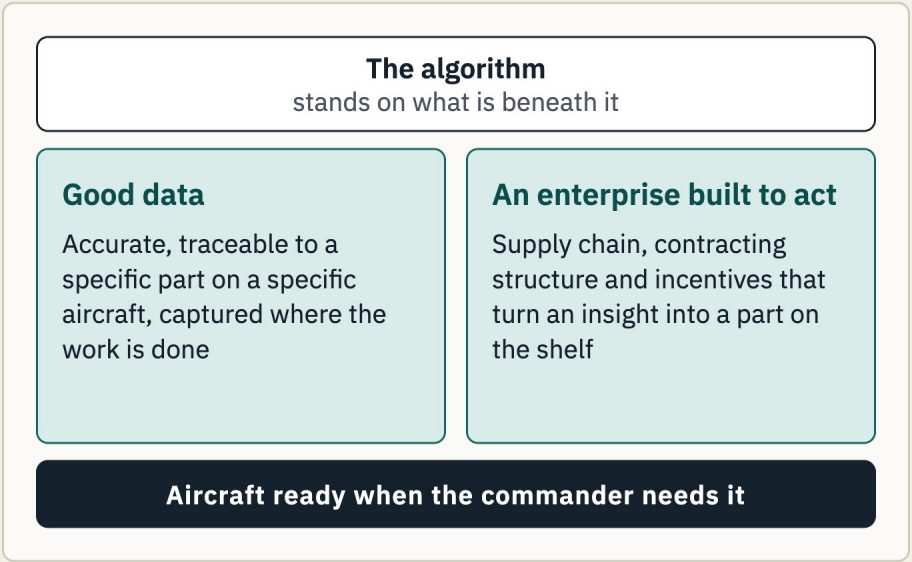
Premises: the maintenance data
Incomplete, inconsistent, late, locked in systems that do not talk

AI: a logic system
Applies rules or learned patterns, quickly, at scale, with an air of authority

Conclusion: fast management of bad data
Not better decisions

Validity guarantees nothing about truth. In maintenance the premises are data, so the quality of the records decides the quality of the answer.

The outcome depends on two things that sit outside the algorithm.



The CH-53K is a smart, digital aircraft. Placing it inside a dumb enterprise is a poor bargain: its intelligence is only as valuable as the ecosystem around it.

AI can be aimed at the aircraft or at the industrial base.

The aircraft

CBM+ · fatigue damage monitoring · digital twin

Replace a part on the measured stress it has seen, tied to its serial number, not on fixed flight hours.

Tells you what will be needed

The industrial base

Ariel (Sikorsky) · DLA · 6,000+ spare parts · Captains of Industry

Suppliers, lead times, demand signals, obsolescence risk, inventory in the wrong place.

Tells you whether the enterprise can deliver it

Not competing applications but two halves of one problem. The article describes Ariel as launched in July 2026, as the author understands it.

A failure forecast is worth little if the part cannot arrive in time.

Aircraft-facing AI says
This component will fail in 400 flight hours

THE GAP

Industrial-base AI would show
The replacement has a 14-month lead time and the supplier has not been told

One tells you what will be needed; the other tells you whether the enterprise can deliver it. A force with only one of the two has half an answer.

Two connectors join the halves: the digital thread and the contract.

Digital thread: one unbroken record per part

Design	Manufacture	Installation
Operation	Repair	Retirement

Without it, aircraft data cannot be tied to factory or depot data.

Performance-based logistics (PBL)
The supplier is paid for outcomes, not activity.

The thread is the data half and PBL is the contractual half. With both, an aircraft's real condition connects to a part's real history and a supplier's real performance.

In the 2018 CH-53E award, the contract created the incentive and the data came with it.

Traditional PBL
Measures supply response time and parts availability. Rewards **parts in a warehouse**.

Sikorsky award, Nov 2018: $717M, four years
Adds an aircraft availability metric. Rewards **aircraft that fly**.

ENTERPRISE > DATA > AI

A shared data environment linked parts changes to changes in aircraft availability, the connection an AI needs in order to learn anything. The order matters: enterprise, then data, then AI.

A performance contract is only as good as the measurement behind it.

2021 DOD INSPECTOR GENERAL AUDIT OF DLA AVIATION

13
sole-source Captains of Industry contracts

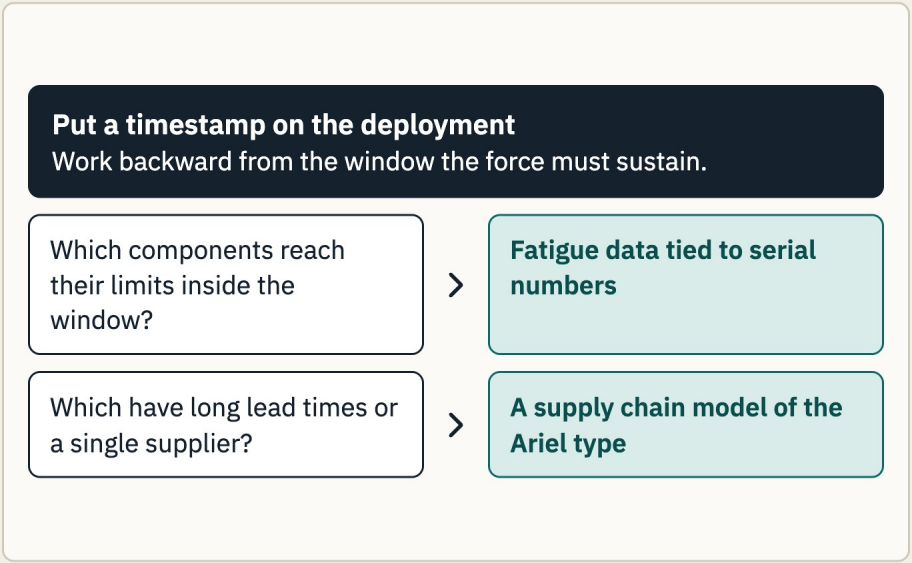
$55.6B
combined estimated value

Savings not validated
Estimates never checked against actual performance

53% on-time delivery
Against a 90% objective, in a contract with no metrics

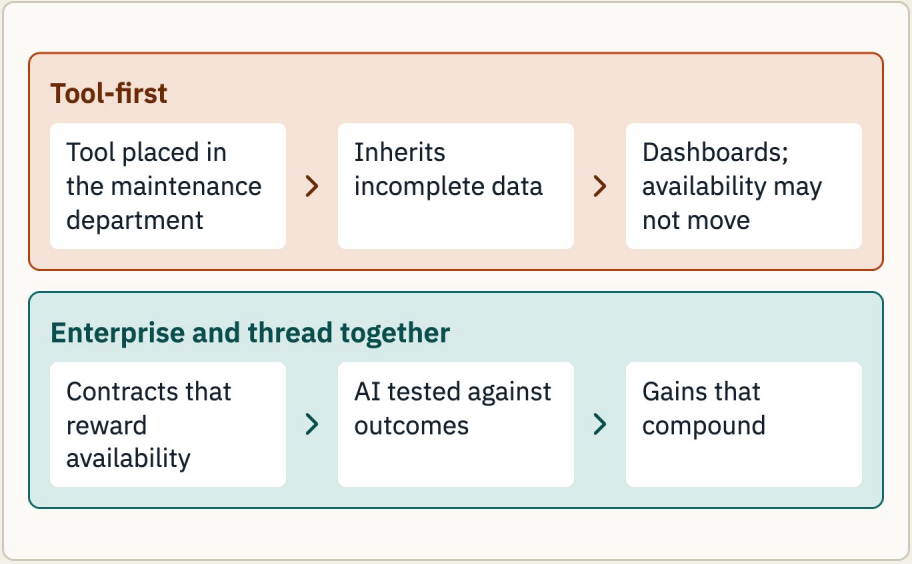
Without trustworthy data, a performance contract is an act of faith. AI across thousands of parts will either sharpen accountability or conceal its absence.

For a distributed force, sustainment is a combat function.



The impact force cannot lean on a large fixed logistics footprint. Where a part or repair sits decides how long it can fight: an advantage with good data, a hidden vulnerability with bad.

Tool-first looks like progress. Build the enterprise and the data thread together.



The motive is sound: overburdened shops need help. But much of the problem lives upstream. The alternative is slower to describe and harder to buy, and the only one that compounds.

The argument names the evidence that would show it is wrong.

If tool-first works
Fast gains from tools on carefully chosen problems, which the data-first argument underestimates. Modest tools might improve data capture in the very act of being used.

If Ariel is less than described
A better interface to existing records rather than a model of the industrial base. The author says he will state so plainly.

Stated openly, these are the tests: data-first compounds only if tool-first cannot match it on chosen problems, and Ariel models the industrial base.

Seven questions decide whether AI delivers value in sustainment.

1. Is the data fit to reason over?
2. Is the enterprise built to act?
3. Do the aircraft and industrial-base halves connect?
4. Who owns the data, and who can see it?
5. How will we know it works, and who audits it?
6. Can it travel to other naval aviation programs?
7. Does it degrade gracefully in a distributed fight?

Will we build the enterprise first, or buy the tool and hope the enterprise follows?