OpsPilot

Bad Actor Elimination — User Manual

Eliminate Repeat-Failure Equipment · AI Engineering Co-Pilot

What this guide covers — what a bad actor is, how the OpsPilot module drives it to a permanent fix, what to have ready, and the register you receive.

1. What is a bad actor?

A “bad actor” is the piece of equipment that keeps failing — the one a few assets that quietly consume a disproportionate share of the maintenance budget and the downtime. Bad actor elimination is the discipline of stopping it for good: quantify what it truly costs, find the real root cause, and design a permanent countermeasure rather than the next band-aid that lasts until the failure after.

2. What the OpsPilot module does

Role	Responsibility
🎯 **AI Coach (OpsPilot)**	Guides you to quantify the true cost of the bad actor, find the real root cause, and design a permanent countermeasure — and checks whether the same failure is waiting on sister assets across the fleet.
👷 **Reliability / Maintenance Lead (you)**	Provide the failure history, the actual costs (not estimates), and the operating context — and what has already been tried and why it didn't stick.

3. How it works — the process

#	Stage
1	Quantify — failure frequency, downtime per event, total annual cost
2	Pattern — random or systematic? wear-out or infant mortality?
3	Full failure history review
4	Targeted RCA on the worst failure event
5	Permanent countermeasure design
6	Fleet-wide risk — is the same failure waiting elsewhere?
7	Action register

4. What you will be asked — have this ready

- Your worst bad actor, and roughly how many failures it has had in the last 12 months.
- The actual costs — downtime per event, repair cost, production loss — real figures, not estimates.
- The full failure history and the operating context.
- What has already been tried, and why it didn't hold.

Tip — this module pairs naturally with Weibull (for the failure pattern) and RCA (for the worst event). The pattern tells you whether time-based action even makes sense before you spend money on it.

5. What you receive — the output

A bad actor elimination register and action plan (Word): the quantified cost, the failure pattern, the history review, the targeted RCA, the permanent countermeasure, the fleet-wide risk check and the action register with owners and dates.

6. Worked example (illustrative)

A transfer pump fails five times a year. Quantified, that's not “annoying” — it's, say, A$220,000 a year once downtime and lost production are counted, which reframes the business case for a real fix. The pattern is systematic, not random, so it's not bad luck. A targeted RCA on the worst event finds a piping-induced misalignment that wears the seal. The permanent countermeasure corrects the pipe support — and the fleet-wide check finds two sister pumps installed the same way, so the fix deploys to all three before they fail too.

7. Getting the best result

- **Use real costs.** The true annual cost is usually far higher than the gut estimate — and it's what justifies the fix.
- **Find the pattern first.** Random and systematic failures need different responses.
- **Aim for permanent.** If the countermeasure could fail the same way again, it's a band-aid.
- **Always check the fleet.** A bad actor often has identical siblings quietly heading the same way.