



TIPPING POINT

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Capturing a Federation ship is the first of Blake's problems when his crew try a little corporate espionage at the organisation responsible for creating Gan's limiter. What they discover goes way past the horrors of civilian control, into the realms of biological engineering and sentient circuits that make even cold-blooded Avon shiver...

TIPPING POINT: SUMMARY

Set after the failure of Gan's limiter in the episode *Breakdown*, Blake wants to know if he can disable it permanently. While he makes plans to infiltrate the company responsible for the technological horrors, seasoned rebel Cally makes her own plans to capture a Federation ship. The *Liberator* crew are starting to act as a team, precipitating the change from a rag-tag bunch of criminals on the run into a fearsome rebel force starting to fight back.

Vila and Gan fly Cally's stolen ship to the satellite of Cybele Corporation. Posing as Federation inspectors, Avon and Cally board and mingle easily amongst the other clients. Warmly welcomed at a plush corporate reception, they learn that Cybele is keen to retain their struggling contract with the Federation. They meet Professor Darzi, an expert in the field of neurocybernetics, who has arranged a presentation of her latest products designed to exert control over a person's thoughts, emotions and actions.

On the *Liberator*, Blake shares a moment of reflection with Jenna, revealing that he fears the ease with which the Federation modified his mind. He fears confronting the memories he believes are false and focuses instead on destroying the Federation, a passion which steadily grows into a worrying obsession.

Guarding their stolen ship, Vila convinces Gan to abandon their post and explore the facility. While Cally and Avon are dazzled by Darzi's experiments in creating artificial sentience, Vila and Gan stumble upon the darker, foul consequences of her research. Rows upon rows of dissected mutoid bodies lie in stasis, tangles of cables fused with spinal cords emerging from headless corpses. Frozen in horror, they don't see Darzi's secretary until it is too late.

In the main presentation hall no amount of PR can quell Cally's growing horror. Darzi has demonstrated the creation of a conscious electronic being. Avon's scepticism that the being is sentient is challenged when Cally collapses. She can hear it telepathically and soon Avon can too when it expresses itself in a burst of static, a digital primal scream. The thing is in agony, though what disturbs Avon more is the idea of being conscious in cyberspace, trapped and psychologically constrained for greedy corporate purpose.

Darzi's secretary bursts in to expose them as spies. With their vessel in the hands of the enemy, a desperate Avon threatens to destroy the creature. Darzi laughs; she has destroyed hundreds in the course of her research and imagines that the reward for capturing wanted Rebels will further fund it. Gan and Vila contact the *Liberator* to arrange a hasty rescue. Cally wants the satellite destroyed, unable to bear the psychological torment. Gan asserts the right to life of the employees on board the satellite despite Cybele Corporation's responsibility for his implant. Blake wants to know if the life of the electronic being can be saved, but in a rare passionate moment Avon declares that it is not life and destroys it. He turns on Professor Darzi but is teleported back to the *Liberator*.

The mission seems a hollow failure. Gan attempts to reassure Cally, arguing that Cybele is one of many corporations creating similar products and that they must aim to cut at the heart. Blake agrees that the Federation creates the demand and corporations follow suit. Cally asks Avon why he didn't believe the electronic creature was alive. Avon replies that she misunderstood him; he only meant that it should never have been created.

TIPPING POINT: STORY

“There’s a delightful analogy for it,” Professor Darzi was saying. “Imagine adding grains of sand to a dune, one by one. A single grain is hardly anything at all, a mere speck. At some point, however, at a critical point, one is going to tip the balance. Just one. You will add a single grain and there will be an avalanche. One will send another tumbling, and another, and another until hundreds go cascading down.”

She smiled at her clients, her enthusiasm infectious. There was a gleam in her eye, like one that had first appeared decades ago when she’d learned the first step of computer programming and made the famous words appear on her screen:

-HELLO, WORLD-

“That avalanche, ladies and gentlemen, is where it begins. Apply this model to the human mind and imagine that those grains of sand are neurons, the cells of the brain. From that event, from that specific moment of complexity arises awareness. The brain becomes self aware, sentient... it is what defines us as human beings.”

She paused; it was time to deliver.

“Now imagine if you will, the same model applied to a computer. Can we cause the avalanche, if a program could reach that precise moment of complexity? Can we create that awareness, and what’s more, control it? Programmable behaviour, with awareness enough to for rational decision making for whatever you like, soldiers, mutants, pilots. My friends, I’m here to tell you today not only that we can do it and that we have...”

A proud grin tugged at her lips. “...but that I can show you that moment. I can show you the avalanche.”

“How very unlike you to be lost in thought.”

Blake didn’t respond. Avon had yet to work out how to break the silence without being snide, cynical or in this instance, ironic. On more than one occasion Avon had discovered a brooding Blake sitting alone on the flight deck, biting a thumbnail. Avon’s interruptions were developing into an odd little routine between them with some mutual advantages; Blake was given the opportunity to do some of his darker thinking out loud, and Avon welcomed the chance to compile more data on their unpredictable leader. The more he knew about Blake’s plans, the better. The man had a terrible habit of keeping everyone uninformed of key details in his strategies, at least until their enemies were shooting at them and it was too late to criticise.

Not that it stopped Avon.

He sat opposite Blake on the couch. He wasn’t much one for sleep and there was something soothing about the softer light on the flight deck during the night cycle, the quiet hum of computer banks reassuring without any accompanying alarms signalling pursuit ships on their tail.

“How unlike you to decline the invitation to proselytise,” Avon prompted without much bite. A Blake who was sure of himself was easier to predict than one who was hesitant. There was no use in aggravating him without aim.

“I’ve been thinking,” Blake announced, his gaze still turned inward. Avon resisted making the easy jibe. “Limiters. Like the one inside Gan’s head. What do you know about them?”

Avon met Blake’s eyes, frowning. The implant inside of their companion’s brain had caused them no end of trouble. It was supposed to prevent Gan’s violent impulses, to stop him from killing but its recent malfunction very nearly had lethal consequences. Gan’s brain had been unable to cope with the broken connections and misfiring neurons, the flurry of electricity tormenting his mind and causing him to run a violent rampage through the ship.

The bruises on Blake’s neck were only just beginning to fade. They had been lucky enough to make it to XK-72, a neutrally aligned medical research station where the necessary surgery had saved Gan’s life. They had, however, learned an unfortunate new definition of the term ‘neutral’ space station, which amounted to ‘neutral until an insider rats you out to the Federation’.

“Limiters? I don’t know much. I understood them to be among the first of the Federation’s attempts at neurocybernetics. They appear to me unsurprisingly crude, as any Federation technology designed to suppress the mind is bound to be.”

Blake’s expression darkened and Avon wondered just what he wished to hear. “Now that the broken connections inside the limiter are repaired, I don’t anticipate a repeat performance of Gan’s physical talents.”

“You can’t be sure,” Blake replied bitterly. “It failed once, it might fail again. You’re a technician, Avon. Circuits short out! You saw the damage he could have done, to us, to the ship...”

“...To think I was under the impression this display of concern was for Gan’s health. Is he now a liability to you?”

The room seemed to grow darker to match Blake’s indignation, and he spoke sharply. “The Federation has a history of trying and failing to control men. Trying, and *failing*. There’s about as much care put into the design of that device as there is shown to the people they put it into, and if I can help Gan be free of it, there might just be a chance for others in his situation too. Zen, put up those visuals of the limiter.”

To the deep intonation of the computer’s assent, the sprawling vista of stars displayed on the main screen was replaced with scans of Gan’s brain taken during his operation.

Avon frowned, sensing a plot in the making. “I don’t see the purpose of—”

Blake interrupted. “Zoom in on the limiter. And again. There, see...sharpen the image Zen, as much as you can. Look.”

Magnified before Avon’s eyes was a chipset, a familiar enough sight for a computer technician. What had captured Blake’s interest wasn’t the chip itself, but an engraving to one side.

“Trademark of Cybele Corporation,” Blake read out, looking intently for changes in Avon’s expression. “Well? You don’t recognise it?”

Avon’s reply was dry. “I suspect I will soon wish I didn’t.”