

INSIDE THE VAULTS

A behind-closed-doors history from the world of Fallout with **DAN STAINES**

WHAT IS A VAULT?

» In 2054, 23 years before the bombs fell and consumed the Earth in atomic fire, the United States government began work on Project Safehouse. Funded by junk bonds, it was an ambitious scheme to build a network of underground shelters – “Vaults” – all over the continental United States, the official purpose of which was to protect the populace in the event of nuclear holocaust.

Designed to house approximately 1000 occupants at a single time, each vault was ostensibly equipped with enough facilities and resources to sustain life for hundreds of years. For example, Vault 13, located beneath Mt Whitney in Southern California, contained construction equipment, hydro-agricultural farms, a water purification system, defensive weaponry, communication systems, surface monitors, and an extensive library of educational and entertainment holodiscs.

In 2063, construction of most vaults had been completed and training drills commenced in earnest. Either by accident or design, constant repetition ensured these drills had a numbing effect on the population. When the Great War began in 2077 and the call went out to move into the vaults, many erroneously assumed it was yet another training exercise and chose to

remain topside, perishing in the subsequent conflagration. As a result, the majority of vaults, particularly those in major urban centres, remained underpopulated.

In total, 122 vaults were constructed for public use; of these, only 17 were built to the advertised specifications. These were “controls” in a vast, morally bankrupt, scientifically dubious experiment in social engineering conducted by the Vault-Tec Corporation at the behest of the US government. The other vaults, all 105 of them, were laboratories, more or less identical to each other save for a single crucial difference: a test condition.

According to the available documentation, the purpose of the vault experiments – referred to collectively by its architects as the Societal Preservation Program – was to expose pre-selected pockets of the American population to the “stresses of isolationism” and observe the effects this had on their capacity to re-colonise the wastelands once the vault doors re-opened. Ultimately, the US government – or the Enclave, as it came to be known – intended to use the results of the vault experiments to determine the viability of launching a mission to colonise uninhabited planets beyond the solar system. It is unknown whether the experiments were considered a success in this respect.

VAULT LAYOUT

Vaults were typically constructed according to a standard plan, with minor aesthetic and functional variations peculiar to the territories in which they were established. For example, vaults constructed on the West Coast – in California and the Mojave Wasteland – differ slightly from those constructed on the East Coast in Washington DC and its surrounding areas. Commonalities include:

An entrance or ante-chamber airlock shielded from the outside by a massive gear-shaped “Seal-n-Safe” vault door. Computer controlled from the inside, these weighed several tons and reportedly had a 98% chance of withstanding a direct hit from a nuclear warhead. This figure may have been exaggerated, however.

Living quarters consisting of single rooms with bunk beds and sanitary annex. At capacity, ten people could be assigned to a single room, with bedding shared according to a hot-bunking system.

A recreation area consisting of holodisc viewers and other entertainments, such as billiard and ping-pong tables. This could vary considerably from vault to vault: some vaults, such as Vault 21, had an excess of gaming tables, whereas others – like Vault 55 – didn’t even have a recreation area.

A command centre in which the designated Vault Overseer conducted the business of managing the vault, and in some cases, reported back to Vault-Tec with experimental results. While command centres vary from vault to vault, typical features include a computer lab, an armory, and video monitors for observing vault inhabitants via strategically located Eye-on-You cameras. Many command centres were also equipped with dual 5mm minigun turrets, making them the last line of defence in the event of civil unrest or an outside breach.



Vault Compendium

NAME	LOCATION	TEST CONDITION	FOUND IN
Vault 3	Mojave Wasteland	Control Vault	Fallout: New Vegas
Vault 8	Northern Nevada (Vault City)	Control Vault	Fallout 2
Vault 11	Mojave Wasteland	Dwellers ordered to regularly sacrifice one of their own. Study in power and obedience.	Fallout: New Vegas
Vault 12	Bakersfield	Vault door designed to never close. Purpose: study in the effects of long-term radiation exposure.	Fallout
Vault 13	Southern California	Intended to stay closed for 200 years to study the effects of long-term isolation.	Fallout
Vault 15	Southern California	Population comprised of representatives of radically diverse ideologies.	Fallout
Vault 19	Mojave Wasteland	Population divided into two mutually antagonistic groups: Red and Blue. Study in groupthink and mass paranoia.	Fallout: New Vegas
Vault 21	New Vegas, Nevada	Population comprised of gambling addicts. All disputes resolved by games of chance.	Fallout: New Vegas
Vault 22	Mojave Wasteland	A test-bed for advanced, unsafe agricultural technologies.	Fallout: New Vegas
Vault 27	Unknown	A study in overpopulation. 2000 inhabitants compelled to live in an area designed for 1000.	Fallout Bible
Vault 29	Colorado	Population limited to individuals under the age of 16.	Fallout Bible
Vault 34	Mojave Wasteland	Armoury, which could not be locked, overstocked with weapons and ammunition.	Fallout: New Vegas
Vault 36	Unknown	Food extruders designed to produce only a thin watery gruel.	Fallout Bible
Vault 42	Unknown	No lightbulbs over 40 watts supplied.	Fallout Bible
Vault 53	Unknown	Equipment and machinery designed to break down with infuriating regularity.	Fallout Bible
Vault 55	Unknown	Complete absence of entertainment tapes.	Fallout Bible
Vault 56	Unknown	Complete absence of entertainment tapes, save for those starring a particularly bad comic actor.	Fallout Bible
Vault 68	Unknown	999 men, one woman.	Fallout Bible
Vault 69	Unknown	999 women, one man.	Fallout Bible
Vault 87	Capital Wasteland	A test bed for the Forced Evolutionary Virus (FEV).	Fallout 3
Vault 92	Capital Wasteland	Populated entirely by renowned musicians. White noise used to test the viability of implanting combat-oriented post-hypnotic suggestion.	Fallout 3
Vault 101	Capital Wasteland	Never intended to open. Designed to evaluate the feasibility of a benevolent, dictatorial government within a small community.	Fallout 3
Vault 106	Capital Wasteland	Psychoactive drugs released into air-filtration system.	Fallout 3
Vault 108	Capital Wasteland	Study of interpersonal dynamics in a power vacuum.	Fallout 3
Vault 112	Capital Wasteland	Home of the Tranquility Lane virtual reality simulator. Designed to test effects of long-term exposure to VR simulation.	Fallout 3

* Note: Vaults from Fallout: Tactics, Fallout: Brotherhood of Steel, Fallout: Brotherhood of Steel 2, and Fallout: Van Buren not included. "Fallout Bible" refers to a collection of documents, compiled by Chris Avellone, containing extensive background information on the first two Fallouts.

CASE STUDIES



Vault 3

» One of the few control vaults in the Vault-Tec experiments, Vault 3 functioned more or less as advertised. Originally intended to open after twenty years, its inhabitants wisely elected to remain inside for much longer than that, fearing that contact with the irradiated wastes outside would bring ruin to their idyllic community. And idyllic it was, at least by vault standards. For over a hundred years, Vault 3 functioned as an orderly and democratic society. It was only when the vault's water chip failed (as they so often did) that any inkling of

discontent became apparent.

Lead by Overseer candidate George Stault, a faction within the vault lobbied hard to establish trade with the outside world. Despite a great deal of opposition, most notably from Stault's longtime friend Michael Robinson, the plan went ahead and was initially successful, bringing the vault much needed supplies. Unfortunately, this brought the vault to the attention of the Fiends - a local drug gang noted for its viciousness - who then proceeded to raid the vault and murder its defenseless inhabitants.

Vault 3 is an instructive cause because it shows us that even the "real" vaults - i.e. the vaults that weren't experiments - were doomed to failure by virtue of their design. Isolated and necessarily naive, Vault dwellers could not reasonably expect to survive contact with the brutal and cunning inhabitants of the irradiated wastelands, nor could they remain inside indefinitely. It could've been a hundred years, two hundred, three hundred... eventually something had to give, and when it did, there was no going back.

"NO ONE KNOWS WHAT IT IS GOING TO BE LIKE OUT THERE. THERE COULD BE HORRIFIC MUTANTS, OR STRANGE WANDERING VAGABONDS, ALIENS, MURDEROUS GANGS. WE HAVE NO IDEA. LET'S BE SMART ABOUT THIS."

- MICHAEL ROBINSON, IN A TRAGICALLY PRESICIENT EMAIL TO GEORGE STAULT



Vault 11

» Vault 11 was perhaps the most needlessly cruel of the Vault-Tec's experiments. As the (complicit) Overseer explained to his subjects shortly after the vault door was closed, Vault 11's central computer was programmed to demand a yearly sacrifice - a human sacrifice - or it would exterminate everyone. Predictably, the Overseer himself became the first victim, after which it was decided that every subsequent Overseer - nominated by popular vote - would be the designated sacrifice going forward.

For a while, the system ran as intended. Then the voting blocs emerged. Corruption, bribery, and intimidation

soon followed. Fed up, one exploited vault dweller - Katherine Stone - went on a killing spree and was subsequently nominated as the next Overseer. Using her new authority, Katherine enacted "Overseer Order 745" - rescinding the right to vote and replacing elections with the cold impartiality of the vault computer's random number generator.

The voting blocs were not pleased. In the violence that ensued, all but five of the vault's inhabitants were killed. Broken and hollowed, these five individuals put down their weapons and resolved to die together, with dignity and defiance. "We're not going to send anybody to die

anymore," said one in a recording. "So shut off our water or gas us or do whatever it is you're programmed to do. But we're done listening to you."

There was a prolonged silence. Then this response issued over the Vault's PA system:

"Congratulations, citizens of Vault 11! Despite what you were led to believe, the population of Vault 11 is not going to be exterminated for its disobedience. Instead, the mechanism to open the main vault door has now been enabled, and you can come and go at your leisure."

It was all a test. And the the citizens of Vault 11 had failed catastrophically.



VAULT 12

» Vault 12 was a perfectly functional example of its kind save for one major flaw – its Seal-n-Safe door (i.e. that which ostensibly protected it from the outside world) would not close properly. Unbeknownst to the dwellers of the vault, this was intentional. The purpose of Vault 12 was to test the effects of prolonged radiation exposure on its inhabitants – and without an immense metal cog to protect them, prolonged radiation exposure is exactly what the inhabitants got.

The results, as you might reasonably guess, were not pretty. To begin with, a large number of Bakersfield residents

who weren't "fortunate" enough to be selected for inclusion in the vault quickly discovered that the door was not sealed and promptly invaded, leading to overpopulation and bouts of violence. Those that survived were protected from the blasts and atomic fire, but could not hide from the radioactive fallout that inevitably followed.

At first, there were no noticeable problems, but after a few months the sickness began to manifest. Peoples' skin began to flake and blister, their hair fell out in great ragged clumps. Their eyes yellowed, their voices cracked and

rasped, and some, having lost their higher cognitive functions, became feral and violent. These were the first ghouls: a new race of post-apocalyptic mutants that would come to spread over the entire continental United States.

In the summer of 2083, the newly-created ghouls left the vault and founded what would become known as Necropolis – the City of the Dead – on the remains of Bakersfield. In this respect, Vault 12 is actually one of the more successful of Vault-Tec's experiments. The ghouls were ugly, but they were alive... and that's more than you can say for most vault dwellers.

“UNDER THE SPRAWLING METROPOLIS OF BAKERSFIELD, LIES THE TECHNOLOGICAL MAGNIFICENCE OF VAULT 12. BUILT WITH EVERY AMENITY IN MIND FOR THE PROSPECTIVE VAULT DWELLER, VAULT 12 WAS GIVEN THE “PRESSED VAULT SUIT” AWARD FOR ATTENTION TO PREPAREDNESS.”

– EXCERPT FROM A PRE-WAR ADVERTISEMENT FOR VAULT 12



VAULT 21

» Located in downtown New Vegas, just beyond the glitz and glitter of The Strip, Vault 21 was arguably the most successful of the non-control vaults. Designed as an exercise in equality, the vault featured a perfectly symmetrical layout and was populated entirely by compulsive gamblers, none of whom were vested with any special authority over anyone else. Without a traditional hierarchy and system of discipline and coercion, disputes and matters of policy were decided by games of chance.

The result was a society of a perfect equals. Without laws and ruled by the

whims of Lady Luck, Vault 21 became something of an anarchist utopia, where everyone was on equal-footing and nobody enjoyed and special advantages. As a glowing historical eulogy in one of the vault's computers puts it, “[Vault 21] embodied the perfect equilibrium between self-reliance and social equality.”

But what Lady Luck giveth, Lady Luck can also taketh away. Sometime in the late 2270s, Robert House – the self-appointed czar of the New Vegas strip – learned of Vault 21's existence and attempted to assimilate it into his growing empire. Most within the vault resisted House's

overtures, but there was a small cadre of dwellers who rebuked prevailing wisdom and proposed the dispute be settled in the traditional way: with a big game of blackjack.

After many hours of gruelling play, House's supporters eventually won in an extremely risky gambit and decided to open Vault 21's doors to the outside world. Flush with victory, House moved his goons in the vault, stripped it of its technology, filled the lower levels with cement, and re-modelled the rest as a novelty hotel for New Vegas tourists. Not a bad fate, all things considered.



VAULT 92

» One of the more bizarre vault experiments, Vault 92 was populated by some of the pre-war world's most talented musicians and composers, lured in with promises of “preserving” their artistic talent for the benefit of future generations. A bald-faced lie, of course – the real purpose of Vault 92 was to test the viability of using white noise generators to create “super soldiers” by way of subliminal suggestion.

Working at the behest of the Vault-Tec Corporation, Overseer Richard Rubín theorised that exposing the inhabitants of Vault 92 to subliminal commands encoded

in white noise (pumped continuously, almost undetectably through the vault's PA system) would effectively turn them into hyper-obedient killbots who would kill on command and exhibit superhuman ferocity and endurance. According to the logs found on the vault's computers, while the experiment enjoyed early success, the most promising subject – referred to only as V920717 – began to exhibit violently irrational tendencies, eventually culminating in a fit of “unbridled rage” that cost three lives.

From that point on, things degenerated at a rapid pace. Within a few weeks,

over half of the vault's inhabitants began to exhibit the same symptoms as V920717, resulting in a bloody civil war of sorts in which the still sane segment of the population fought to escape their murderous former friends and colleagues. Attempts by Overseer Rubín to contain the situation by inserting “safe words” into the white noise soup proved ineffective, and eventually he and the rest of his non-crazy subjects were forced to flee the vault, to parts unknown.

“THE SHEER STRENGTH AND TENACITY OF COMBAT SUGGESTION IMPLANTED TEST SUBJECTS IS INCREDIBLE! IMAGINE AN ENTIRE ARMY OF PEOPLE WHO WOULD NEVER DISOBEY A DIRECT ORDER FROM HIGH COMMAND AND CAN FIGHT UNTIL IT TAKES OVER 20 BULLETS TO STOP THEM.”

– OVERSEER RICHARD RUBÍN, PERSONAL LOG



VAULT 108

» Vault 108 remains something of a mystery. According to logs discovered in the Brotherhood of Steel's Citadel in the Capital Wasteland, the experimental purpose of the vault was to study the dynamics of interpersonal conflict in a power vacuum. All positions of authority in the vault were unassigned save for that vault Overseer Brody Jones, who – due to a rare form of terminal cancer – was expected to die within forty months of the experiment's commencement. His death, it was theorised, would act as a catalyst for conflict, forcing the remaining to battle

it out to establish dominance. To make things more interesting, the vault's power source was designed to eventually fail while the armory was stocked with more than three times the standard amount of guns and ammunition.

But here's the weird thing: Vault 108 also had a cloning lab, which – under the direction of a “Doctor Peterson” – produced a small army of emotionally volatile, extremely violent clones of a man named Gary. Exactly why Peterson did this remains unclear, but there are a few plausible theories, the most likely of which posits that Peterson was in fact the

original Gary and hoped to use the clones to establish his dominance in the vault. Another possibility is that the Gary clones were intended to act as a kind of slave labour force, freeing the vault's citizens from manual labour so that they could concentrate on jockeying for power.

Whatever the case, the Gary clones – all 54 of them – eventually banded together and rebelled, massacring everyone in the vault who wasn't a duplicate of themselves. Whether this makes the experiment a success in the eyes of Vault-Tec is uncertain.

HYPERCHAT // TIM CAIN & CHRIS AVELLONE

We sit down with *Fallout* luminaries (and current Obsidian employees) **Tim Cain** and **Chris Avellone** to discuss the origin of the vaults, how to go about designing them, and which ones would be the best to call home...

HYPER: To begin, tell us a little about how the idea of vault experiments occurred to you, and how it developed over time.

TIM CAIN: It all came about because one day Leonard Boyarsky (the lead artist on *Fallout*) asked me how many Vaults had been built, because he wanted to know how many digits to leave room for on a Vault jumpsuit. I told him to leave space for three digits, but later it occurred to me that at 1000 people per vault, that meant that there was room for fewer than a million people in these places. That wasn't nearly enough space to save the population of a big city like Los Angeles, much less the whole country!

So that got me thinking... what if the purpose of these Vaults wasn't to save people, [but] to test them? To test them in ways that would be illegal at best, and immoral at worst. And after some thought, I realized that the only reason to test people in self-enclosed environments, environments that were similar to spacecraft, would be to determine if long term space flights would be viable. This meant the government's real plan wasn't to save the population, but instead to build an ark capable of interstellar flight, to be used in case our own planet was destroyed. And they needed to know who to send on this flight, specifically what kind of personalities and skills and temperaments would be most beneficial. And since they would only have one chance to get this right, the Vaults were used to test these parameters, so that when a spacecraft was finally sent to another planet, the people on board would have the best chance of arriving safe and sound at their destination and be able to start a new civilization there.

I liked this idea because it was dark and conspiratorial and gave the vaults a purpose within a purpose.

Tell us a little about how you developed the "look" of the Vaults, including the iconic blue and yellow jumpsuits. Do you recall what your main goals were in terms of art direction?



TC: The looks of the Vaults and the Vault dwellers was left to the artists' discretions. The only thing I remember was them picking blue for the vault suit color because it stood out well against all of the background tiles: steel plating, dirt, rock, etc. There is very little blue in the *Fallout* world, especially *Fallout 1* and *2* where you could not see the sky.

In the *Fallout Bible*, Chris mentions that many of the vaults were left "empty" to encourage fan-fiction writers. Do either of you read said fan-fiction? Have there been any especially good fan vaults that you can remember?

TC: I haven't read any fan fiction, but I did really like the vault mentioned in the fan film *Fallout Nuka Break*. In the vault where the main character Twig was from, the food extruder had been replaced with a bigger and better model during construction, but that replacement left no room for a gym. Over time, the vault dwellers grew very obese from all of the wonderful food and no way to exercise, until several generations later when Twig decided to leave to look for more Nuka Cola,

he was considered really skinny by those remaining behind.

Chris Avellone: If I said that, I'd best retract it – to be honest, I always felt that a lot of the vaults were left open to preserve the design aesthetic of "wiggly room," which allows for future vaults to be developed by game developers. Fan fic writers could certainly do the same, and like Tim says, *Nuka Break* and *Wayside Creations* took the idea and ran with it, for example.

Have there been any especially popular or unpopular vaults over the course of the series? In your experience, what is it about vaults – as a concept, and as levels – that resonates most with players?

TC: I'm not sure which vaults were considered popular or not, but as a concept, vaults were always intended to be *Fallout's* dungeons, and RPG players love their dungeons. Vaults provided a setting-specific way to have dungeons spread throughout the map, each one with its own "theme" that was related to its reason for being constructed in the first place. I think they worked well, both as settings and as a story device.



"A CANTICLE FOR LEIBOWITZ" LEFT A BIG IMPRESSION ON ME ABOUT WHAT A POST-APOCALYPTIC SOCIETY WOULD BE LIKE AND HOW THEY MIGHT REVERE THE TECHNOLOGY THAT HAD COME BEFORE."

CA: I'd agree with Tim (and it's in my best interest to do so with one of the *Fallout* founders). They were easy dungeons to design and explore in the series, and it was fun to design hooks for the residents and the reasons for their survival or extinction. My personal favorite is probably Vault 11 in *Fallout: New Vegas* because the campaign posters make you wonder what the hell is going on... and also I thought the presence of Vault City in *Fallout 2* was important to showcase how a Vault was "supposed" to work if only to provide contrast to how messed up most ended being... although technically, I assume VC was the flawed one because it actually worked as the residents intended.

How many vaults have been left on the cutting room floor over the course of the series? Do you have, like, a folder somewhere full of unused ideas? If so, care to share any of them?

TC: I was always darkly amused by the idea for Vault 36, where the food extruders only produced a thin gruel-like paste. Technically, everyone would be able to

survive there...but what kind of existence would it be? Bleak, especially without chocolate.

CA: This wasn't a "vault" per se, but one of the wishes I had for Van Buren (and *Old World Blues*) was to find the factory that made GECKs and explore that. In Van Buren, this would be the robot-maintained Nursery (Harold was supposed to have ended up there, with Bob allowing him admittance) – and the threat there was that the vegetation there was in danger of still carrying the New Plague. I got to do a variation of an agricultural-themed area for *Wasteland 2*, however, so I'm happy about that.

How did it feel to explore a vault in 3D for the first time in *Fallout 3*? As the creators of the original vaults, were you pleased with how Bethesda iterated on the concept? Did you learn anything from their approach?

CA: I was pretty happy with it – Bethesda had a tough job to acquaint fans with the *Fallout* universe, and the sequences where you grow up in Vault 101 I thought gave the player a good perspective of what life in the vaults was like, and in some respects, made you realize more what the culture could be than in *Fallout 1* (where the intro narrative was effective, but your first player actions are actually outside the Vault). This is a minor thing, but despite being thrust outside the Vault in *Fallout 1*, going back to Vault 13 I thought was really well-written in terms of reactivity because it showcases how much you as a player have changed compared to the other residents ("is that a gun?").

Let's say I want to design a vault. Where should I start? What narrative, thematic, and aesthetic checkboxes should I be ticking?

CA: Personal take? Take a look at a "day in the life" in today's world and subtract something from it or mutate it (what if no one in the Vault speaks the same language, what if the vault mandates three leaders with equal authority at all times, what if all the manuals and computer screens display all characters in reverse, what if the Vault has a ceiling that's only five feet high, what if the Vault shows another series

of rooms and chambers through an impenetrable window in one side of the Vault, what if once a year, the Vault elevator kidnaps one citizen at a time and takes them down to a hidden floor, what if the Vault tells the first child to hit 13 that all the adults must die in order to keep food and medicine in supply until the Vault opens and keeps doing it each generation, etc.), or ask one "what if..." question. The answer should take you in multiple, interesting directions – if you're designing it for the game, however, you'd want it to be an interesting dungeon to explore, complement the other vaults, and also reinforce the story arc and NPCs in the area whenever possible. Try to look for ways for how it could generate quests and adventure seeds beyond the vault itself.

I feel the "testing for space flight" is something else to consider into the theme, but ultimately, if in doubt, it seems like most of the fun should be in seeing how a society might react when something taken for granted is removed.

What are your primary sources of inspiration for the vaults? Are there any particular experiments or historical events that stand out as major inspirations?

TC: The Cold War was a big inspiration for our vault ideas, of course. Lots of blank metal, pipes, and old-fashioned technology. And the book "A Canticle For Leibowitz" left a big impression on me about what a post-apocalyptic society would be like and how they might revere the technology that had come before.

Let's say that, for whatever reason, you're compelled to live in an "experimental" vault of your choosing, as a regular dweller with no knowledge of Project Safehouse. Which one do you choose, and what's your survival strategy?

TC: I would choose to live in Vault 55, which had no entertainment products of any kind. I think a game developer would be very welcome there.

CA: Vault 13, so I can go in search of adventure, or Vault 8, because, hey, they made it. Vault 69 would be an easy choice, although after watching a Boy and his Dog, that may not be as much fun as it seems at first.

