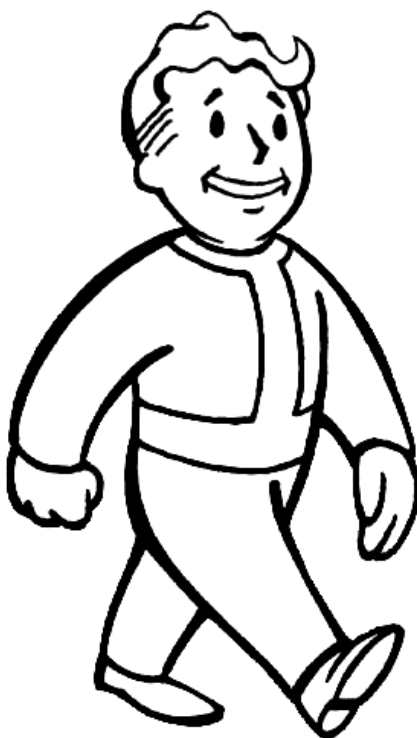


FALLOUT BIBLE UPDATE 6

JULY 10TH 2002?



BACK FROM THE FROZEN NORTH... FOR NOW

Well, I officially sold my soul by doing an Icewind Dale 2 designer diary and bartered it for some time to do another one of these Fallout Bible updates. I don't know when the next one is going to be – depends how Icewind Dale 2 is going.

Anyway, welcome to the sixth Fallout Bible update - if you missed any of the others, check the Black Isle main page (www.blackisle.com), scroll down, and click on the "Read More News Here" section (and scroll down or do a "Find" for Fallout). The first three updates have been collected into "Update Zero" (a cryptic and sinister name, isn't it?) and the fourth and fifth update stand on their own. The reason the fourth and fifth stand on their own is because they are brave little updates, and my heart goes out to them.

For those of you who haven't seen these before, the Fallout Bible is just a collection of all the background material and hi-jinks from Fallout 1 and Fallout 2 compiled into one document so the fans can take a look at it. The term "Bible" is misleading, since it's not supposed to start some religion or be the word of some holy power – it's just a term I stole from Chris Taylor (Fallout 1, Fallout Tactics), who apparently stole it from some guy named Dan Wood who called me at work once. Dan Wood's Bible and this Bible aren't the same thing. This is just for fun. It is also not a marketing ploy to drum up Fallout sales, since this is for fans who already snagged the game and wouldn't mind knowing a bit more about what went on behind the

scenes or what material never actually made it in. Please feel free to take this paragraph and formulate whatever conspiracy theories you want.

Some of the stuff in this update a little rough, so if you see anything wrong or if you think of anything you'd like to see, drop me a line at Cavellone@blackisle.com and I'll see what I can do. I can't promise I'll answer your emails immediately (especially with Icewind Dale 2 and my repeated attempts to barricade my office against Josh Sawyer's sudden designer artillery strikes), but I will get around to it, usually when the weekend hits.

Small, quick questions have a much faster turn around time. This is because I am lazy. More on this below.

Oh, there may be parts of this doc that are sketchy because I am tired. And cranky.

Thanks for supporting Fallout,

Chris Avellone @ Black Isle Something Or Other

FAST FORWARD

Okay, I always start these updates with a list. So here it is!

1. Again, any questions or suggestions for the Fallout Bible, send it on in to Cavellone@blackisle.com.

Before you do, though, read #2, below, and "Questions I Will Not Answer," after that.

No, really.

2. Suggestions for material to include in the Bible, suggestions for good Fallout fifties tunes, comments on why you like pen and paper RPGs over computer RPGs, questions about Fallout events, and suggestions for good source material are welcome, but there are a number of things I can't or won't answer because I am busy and I hate you. They include:

- Giving hints or walkthroughs for the game. If you need a hint or a walkthrough, go to the Black Isle message boards at:

<http://feedback.blackisle.com>

And within fifteen seconds, someone will post an answer to your problem. The answer will occasionally be snide and sarcastic and may be followed by the words, "silly rabbit" or "dumbass," but you will get your answer. So make your voice heard.

- Providing technical support. If you have any troubles with your Fallout disks or other Interplay games, you need to contact Interplay customer support at one of the following addresses:

For technical problems:

support@interplay.com

And for any other questions regarding Interplay products, barring hints and tips:

orderdesk@interplay.com

- Answering questions outside of Fallout 1 or 2. I cannot answer any questions about a Fallout 3. There's not one in production. I swear upon Josh Sawyer's life that I am never going to answer this question again, so cut it out.
- Reading fan fiction or fan-created material for Fallout.
- Providing any information, walkthroughs, hints, or support on the *Baldur's Gate* series, *Icewind Dale I (or II)*, *Planescape: Torment*, or *Dark Alliance*.

3. Thanks for everybody who sent in tunes - if you have anything that strikes you as a good Fallout fifties ambiance, send it my way at the email address, in #1, above. I'm always looking for new music tunes.

4. There are a lot of questions sitting in my archive. If you don't see your question here (especially if it was recent), I haven't forgotten, I just haven't gotten around to it yet because I AM REALLY, REALLY BUSY.

5. BTW, if anyone has the link for the Unwashed Villagers site (or if it still exists), let me know. I need to make sure they are not some lie concocted by Dave Hendee.

6. Sebastien Caisse is our **Big Winner #1** from last time on the Magic Eightball and went beyond the call of duty by providing a full list of Tell Me Abouts for Fallout 1 because he is a crazy programmer guy and knows how to crack Fallout 1 code like a twig. Sebastien, I salute you. (Feel free to post your answers on the Fallout message boards.) His other great claim to fame is the fact that I occasionally get bounced from his email address, which makes me mad and scream his name loudly, usually while I am having sex with my girlfriend.

7. Thanks also to **Michael Jeppesen**, who also gave me a list Tell Me Abouts... thanks, Michael.

8. BTW, **Big Winner #2** on the Magic Eightball is **Gammons**, however, who, while not as fast as Sebastien, included all the same answers, along with *text corrections*. Thanks, Gammons. I salute you as well. There were some other people, too, but they came in third, fourth, fifth, and so on, and I don't feel like listing them out.

9. If I ever get anyone's name wrong when I respond to your emails, tough. Some of you have "a"s and "e"s in strange places – maybe if your parents had named you with some sense, there wouldn't be a problem.

10. If you like Fallout, **Peter Nellemann** (who I'm guessing is FO-Tank, one of the 12 Dark Apostles of Fallout fame) has a site you might want to check out:

www.geocities.com/fo_tank

And so does ol' "Man of a Million Questions" Deadlus:

<http://fallout.gracz.net/fmc/ks/index.php>

These links may be broken by the time I post this, but not as of this morning. Deadlus' site looks pretty spiffy, even though I couldn't read a word of it since it's in Russian, I think.

11. And, "Pawel," if you're out there, I tried responding to your address and kept getting bounced, so I just want to let you know I'll be answering your questions in a future update, but it probably won't be for a while.

Now let me get on with being obstinate:

QUESTIONS I WILL NOT ANSWER

In addition to the list of questions I **will** be answering this time, I also have a list of questions I will **not** answer or questions that will most likely take a very long time before you see them. Among them are the following.

1. When is Fallout 3 going to happen?/How's Fallout 3 coming along?/I heard you guys are working on Fallout 3! When is it due out?/Will Fallout 3 be ready by Christmas?/Is Fallout 3 contingent on getting the Bible done?/Are you guys planning a sequel to Fallout 2?

Fallout 3 isn't in production.

Fallout 3 isn't contingent on getting the Bible done.

The Fallout Bible isn't a marketing ploy.

I am compiling this information because it's fun and because I'm trying to get prepped to release a Fallout pen-and-paper game (for free) on the web, and it pays to run this stuff by you guys and get your feedback, since a hundred extra pairs of eyes (and torches) never hurts.

I swear upon Josh Sawyer's life that I will never answer this question again. If you email me this question, I will not answer it.

2. What happened to China, Russia, or any other areas outside the area explored in Fallout 1 and 2?

I don't know. To tell the truth, I really don't care – since I am an Ugly American living in California, I only care about the areas in F1 and F2, and possibly any areas close by that have some impact on them.

As for the rest of the world ("ROW"), there's little to nothing on the ROW that hasn't already been hinted at in the games (this also includes sections of North America and the United States that weren't in Fallout 1 or 2). Anything I would write would be speculation and would require a great deal of research, much more than I can put in on weekends, so it's going to be a while before you see these answers. It's quite possible you may *never* see these answers (fleshing out other countries may pigeonhole potential future Fallout titles that would want to make up their own history for the region). I may change my mind later, because I am fickle, but until then, don't send me these questions, either.

3. What was U.S./world history like before the timeline included in previous Fallout updates?

No one has asked this yet, but I thought I would cut this question off at the pass. Fallout takes place on a future earth, in an alternate timeline. I will not be including any information on how and when it diverged - it will remain one of the mysteries of the setting. Just let it be known that it diverged after WW2, and leave it at that.

4. What were the experiments in the other Vaults and where are they located?

Answering this might curtail any adventure seeds for the future, so I won't be answering it.

5. What cities were nuked and which ones weren't?

See answer #4. If someone is making a game in a section of the Fallout universe, then I'd like to leave them the freedom to say what was nuked and what wasn't.

QUESTIONS THAT MAY TAKE A WHILE

1. Any question related to blueprints and schematics for Power Armor, Robots, etc, is going to take a while; I probably won't be able to get to them until I have a lot more free time than right now. Those models and concepts don't exist, and I'd have to draft them by hand or shanghai a Black Isle artist. We got a bunch of new artists, but so far, they're pretty crafty and have been avoiding my nets and pit traps.

2. If you send more than one question to me in an email, the time it takes me to answer these emails is about one month per question past the first, because I am lazy and I hate you. If you break them up into smaller, one question emails, this makes me much happier.

PIE IN THE FACE SECTION

Welcome to the pie in the face of the section where you get to rub my nose in bad facts. Based on how things are going, this will most likely be a regular feature.

Vesuvius corrected me on ZAX's initialization, so here's the corrected entry in the Fallout timeline from 2-11-02:

2053			ZAX 1.0 goes on-line, developed by Vault-Tec. Initially a prototype of some of the systems designed to govern the vaults, it is given to the government to help the Department of Energy collect resource data. Within a year, it is taken by the military for plague and tactical research; one version, ZAX 1.2 is constructed for West Tek (below).
------	--	--	--

Oskar Liljeblad has pointed out another flaw in the timeline:

Look at these two paragraphs from the timetable in the Fallout bible from 2002-02-11:

2162 May 10: Fallout 1 Ends: Vault Dweller returns to Vault 13, only to be told "you're here and you have to leave." Some members of the Vault (led by Lydia, the head of the "return to the surface" faction, and including her supporters, Therese and Lyle) follow soon afterwards.

2165 May 12: Vault Dweller removes the Vault suit and from this day forward, never wears it again.

My question is, what happend during the three years between 2162 and 2165? Or is 2165 May 12 the incorrect date (maybe it should be two days after the vault dweller was expelled)?

2162	May	12	Vault Dweller removes the Vault suit and from this day forward, never wears it again.
2162	July	10	Vault Dweller heads North with a small group of Vault-dwellers and wastelanders and founds the small village of Arroyo.

Thanks, Oskar. If you (or anybody else) see anything else wrong, don't hesitate to let me know. Or better yet, post it on the boards rather than email me directly, where it may take me a few days to see it.

QUESTIONS GALORE

We've got the usual round of questions this time. Ignore the bumbling numbering scheme - I gave up on keeping consistent after Deadlus' question barrage.

Some groovy cat named **CoolJiggily** had this comment to make:

0. I was just wondering once when I killed the deathclaw in Navaro (Xarn I think) I had used an energy weapon and had a critical hit. The kind where the target drops everything on the ground when they die. The claw the he was weilding fell it was a purple(maybe blue) square with white text that said deathclaw weapon 2(or something like that). This item was a okay melee weapon. Do you have any knowledge about this?

What we do in most of the RPGs we make (both in Fallout and in the Infinity Engine games) is equip monsters and NPCS with "invisible weapons" that simulate their attacks. The items are supposed to vanish upon death, but if you hit it too hard and too fast for the computer to handle, boom, it may drop it.

So that's the big mystery. Oh, and way to kill Xarn, you big savior of the world, you.

The first of many from **Deadlus** in an attempt to clean out my mailbox:

1a. I know that enclave didn't even exist as an idea in FO1, but it is in FO2 and I thought that you guys have a ready story "why enclave didn't do anything about master" and you didn't put it in the game for some reasons!

Nope, there was no ready story, at least that I was aware of - Cain & crew coined the Enclave, and they may have had some reason why they didn't do anything about the Master. It may just be that the Enclave was only active in Northern California and besides, not many people even knew about the Master's operation in Southern California anyway.

1b. Eh, I guess I have to be pientent.....BTW. I know you answered one (only one, the smallest one :) of my qustions! BTW2. In tanker there was a dead vault 13 guy near those vault doors, how did he get there blah blah (you know the rest)? BTW3. How did those "aliens", floaters and other things get into the tanker??? They sneaked in or something?? I had some other qustions but I forgot them :) , oh, that Ed guy ("You see Ed, Ed is dead) supossed to be another in-joke like Leonard Boyarski ?

Vault suit guy in tanker: Unknown. It's possible he was a test subject left over from the Enclave when they held the tanker, or a traveler from Vault City. His origin was never mentioned in the documentation.

The aliens, floaters, and centaurs were placed in the tanker, since we needed some major baddies in the tanker at the end game. They most likely crawled down there in search of a lair before the punks showed up. Centaurs and floaters get around – mostly wherever game logic (not necessarily plausibility) dictates.

Ed - yeah, it's in-joke. According to **Chris Taylor**:

<p>What's the deal with Ed? Zed's Dead, baby, Zed's dead. From <i>Pulp Fiction</i>. That's part of the reference. Ed was twofold: to immediately show the player that the outside world was dangerous, and to tell the player that he wasn't the first choice of someone to send out. Ed was sent out before the waterchip malfunction, however, since he's just bones.</p>
--

So there you are.

1c. In the undergrounds of Broken Hills there was (another) "dead vault women" :) (with no legs :), I know it is f. detail but you can always make something interesting out of nothing :) (but please, make her someone interesting not just someone from vault city! :)

Sorry, there were no other vaults around; she's from Vault City - one of the many Vault City unfortunates who couldn't adapt to the harsh life of the wasteland. I do not know whether she had any legs while she was alive.

1cc. There was repair bot in Klamath's underground, was it from that vertibird near the second repair bot / near the canyon?

It's possible, but unlikely (vertibirds tend to carry only one Mr. Handy when possible). It was mostly like an old repair robot from the days when Klamath Falls was a real town.

1d. In Redding there was a corpse (under some rocks) of a man in vault suit, from where he, and how did he get there (and died)?

He's another sucker from Vault City, possibly having come in on a caravan. He could also be a fugitive Enclave scientist or worker, since they wear Vault suits, too, but this is unlikely.

1e. Vault doors were in the tanker in San Fran, from which vault are they, and who brought them onto the ship?

They are unmarked models, planned for shipment somewhere up or down the West Coast. The "Vault Doors" were used for more than just Vaults, however, so the door may have been intended for some other facility. It's most likely just there because of designer caveat/designer privilege/game logic - the designer probably just needed something to fill up space in the tanker, and the door looked like good "junk."

1f. Bible is updated again and it's been a while since I've sent those questions.... (answer, please) O, and one new question Is EPA and the other locations that weren't added to FO2 in master.dat or somewhere are finished (Because you can replace one of the existing towns with ex. EPA, but I don't have time to check this) ?

No - they were never finished. I posted the original design for EPA, below (much, much farther below), if you want to see it. There's not one for the Abbey or the Primitive Village that I can find.

1g. How did that guy from New Reno Arms get vault-tec speech module? And how did that friend of Vic (from vault city) get the "vault13 flasks" (I don't remember that it was explained in FO2)? Oh, and why Enclave didn't do anything about master after he took vault-tec demonstration vault? BTW. How did master move, he's just a big piece of crap!

1. Vault-Tec speech module: He got it from a traveling merchant (similar to how Vic got the V13 water flask). Eldridge likes to collect old Pre-War relics and throw it in his basement to keep Algernon amused - and in the hopes the kid will build a nuclear missile he can use to hold all of New Reno hostage.

2. Ed the Brahmin Dealer may have traded with some of the Vault 13 refugees from Vault 13 when they left the Vault after the Vault Dweller at the end of Fallout 1, or one of the V13 refugees may have traded with a random caravan master that eventually sold it to Ed. Again, it was mostly a plot device carrot, and no documentation exists.

3. The Enclave didn't even exist as an idea in Fallout 1 (to my knowledge), so they never really factored in to any of the events in Fallout 1.

4. I have no idea how the Master was moved. It was probably either by a large (steam) truck or caravan, but I don't have any specific information on how he was moved. I doubt a caravan could do it unless Grey was much smaller and, uh, less "spread out" than he was at the end of Fallout 1, which is entirely possible, but he sounded pretty fucking mutated in his audio diary in the Military Base. Maybe they poured him into a toxic waste barrel and transported him that way. I haven't found an explanation in F1 anywhere - so if anyone finds one before I post an answer, let me know.

One from **Pasi Eronen** in Finland:

2. I'd like to know more about the player modeling behind the surface of the game. The reason for this is that I am participating a course in CS, which is titled Adaptive Learning Environments. In this course I have group work with my colleagues about User modeling in Computer Games. Apart to theory part, it would really help us a lot to hear also, how this is done in reality - in true gaming environment.

Especially in Fallout 2, there was huge difference in the story line, depending on the way one played. I remember playing once in a bit morbid way, digging up dead people and blazing my way through events. I didn't pay me in the end, or well, depends how do you see it.. :) Usually events that one encountered were more pleasing, when playing it more ethically "correct" way. In my opinion, this kind of reflection of one's behaviour to whole scene in the game were one the best things in the game.

If you would have some time to answer me and kindly reveal some of the tricks and techniques used behind the scenes, I'd be really happy for that!

There really isn't any trick to it, just mostly a lot of grunt work (though fun grunt work).

Essentially, what needs to be done (and I'm using an NPC's dialogue as an example), you essentially write one dialogue that's three to four dialogues in one, and you do "character checks" at various points to see where the dialogue goes (i.e., if your Intelligence is low, you go here, if your Speech skill is high, you go here, if you're carrying a gun, you go here, and so on). It's a lot of work, and it requires that you design out all three to four of those paths completely so each player type gets a different experience.

For quests, you do the same thing - you design it (at least) three different ways so a player of different skills can solve it.

I don't know if you're familiar with a "Choose Your Own Adventure" book, but that's what the game really boils down to - it's just a big Choose Your Own Adventure, where the designers try to plot out every possible path the player can take in as much detail as possible. Game logic and development parameters usually prevent you from being able to design out quest solutions with as much freedom as you would have in a pen-and-paper game, though.

One from **Richard M. Lippincott**:

3. Perhaps you can answer the question of whether Fallout is set in an alternate timeline or not. By alternate timeline, I mean a world where some part of our history up to now was different then what we know. It seems many fans are inclined to believe this view. Some who claim to be "in the know" and say they've seen the original design documents for the first game support this view. However, I've noticed no such evidence in the Fallout Bible.

Fallout takes place in an alternate timeline. There's no documentation about exactly how and when it diverged (and this will never be addressed in the Fallout Bible - see above), but it did. You will have to take it on faith.

Sebastien Caisse (BIG WINNER #1) sent me a correction:

4. John Deily mentions that he [Melchior] got his pets from outside... however aren't they locked in?...

No, that was my fault (John is blameless). I forgot the Enclave had sealed off the base. Melchior's pets probably came from (now collapsed) side caverns in the Military Base (kind of like those mutated pigrats

running around). Sorry about that. I need to research the Military Base some more, so if I find anything different, I'll let you know.

A question from **Steelface the Hunter**, who has a scary name:

5. What is the deal with the retinal scanner from the docks in San Francisco, and all those guys blundering about some submarine.

The retinal scanner was just there for show. As for the submarine, that's a longer story.

As mentioned in Fallout 2, the Shi (or more specifically, Dr. Fung) say that they are descendants from the crew of a Chinese nuclear submarine (the *Shi-huang-ti* - the remains of which were used to help build the Palace in San Francisco).

This submarine was supposed to play a larger role in Fallout 2, but it was axed because the game was too big as it was. Basically, it was another stage to "get the tanker ready" quest - basically, there was this old Chinese submarine buried beneath in the waters of San Francisco, and if it detected any American vessel coming anywhere near it, its automated defense system would fire its missiles at the vessel and DESTROY it. So the intention was for you to find some deactivation code to disarm it before you could take the tanker safely to the Enclave.

An inevitable consistency question from **Bud Klein**:

6. Last update, you said there were 1/200 cars/people ration in the NCR. If there were so many working cars in NCR, where were they?

They're there. It's game logic. You don't see them for the same reason NCR is only three maps, only has 1 councilor/senator, and only about 40-50 people in its city limits. That's why the Chop Shop in Reno exists, why the bum outside of NCR offers to watch a car for you before you show up in one, and a reason that NCR built a garage in Shady Sands.

So to explain "game logic" in this instance, there's nothing precious about building a car of your own if you can steal one – or if somebody else in town has one. Or in the words of one designer (me), "there's no good reason why a PC would want to undertake a fucking huge Fed Ex quest to rebuild one if they can jack one from the locals." The last part is especially true considering town-wide mass murder is possible in both Fallout 1 and 2.

And before you get the image of tanks and jeeps flying around everywhere with heavy machine guns mounted on the back, most of that junk is old tractors and crap like taxis, old buses, snowplows, and even old construction equipment. It's possible that mysterious old steam-truck mentioned in the bowels of the F1 data archive is still lumbering around somewhere. The caravan houses of the Hub, in particular, around the time in Fallout 2, have been looking to further its trade influence, and new vehicles (and types of transport, such as trains, boats, or barges) have been eagerly sought after for carrying large amounts of trade goods vast distances. Good ol' human greed will move mountains. Or at least rebuild things that can. Once they learn of the Enclave's presence in the North, they are likely to have huge bounties promised for vertibird plans - or better, a working vertibird.

One from **Steel Knight**...

1. In FO2, the random encounter cafe of broken dreams Tandy says Ian is some ware in FO2 is this true and if so, ware???

Tandi is a big fat liar. Ian was originally intended to be in Fallout 2 (as a very old guy in the Den), but it was scrapped near the end because there were (in our opinion) too many characters making repeat appearances already. If I can dig up his old dialogue at some point, I will.

Two (and then four more), from **Albert**.

1. Who owned the dog named Sasha that appears as an easter egg? At the cathedral there's a dog outside that you can't get to, but whose description says that she's a Siberian Husky faithfully awaiting her owner's return. Then in the Den, one of the things that the addicts were yell periodically is "Sasha!". Which of the developers owned Sasha?

Sasha was owned by Vince Denardo, one of the producers here at Interplay (he didn't work on Fallout, but he was friends with many of them - he produced *Conquest of the New World*, among other titles). I think Dave Hendee said:

Dave Hendee: Sasha is the name of one of Interplay's old producers, Vince Denardo. He did not work on Fallout 1 or 2. It was a bit of tradition to have a dog somewhere in an Interplay game, in some shape or form. Sasha is normally placed in the special thanks section or some other place in most of our older manuals.

2. How do the raiders continue as organizations over the years? Do they recruit people or do they have kids of their own? I ask because you never see any raider kids and it seems to me that raiders would not be good at raising kids and keeping them healthy.

It's mostly for game logic reasons (kind of like the fact NCR is only 3 maps, has 1 councilor, etc, etc.). You try not to put kids in places where there's going to be gunfights, because they tend to get caught in the crossfire and before you know it, you've got the Childkiller Perk. Also, if you're playing the English version, then some kids are removed for localization purposes.

But, if Fallout took place in the real world, raider kids would exist.

Raiders add to their numbers through press-gang tactics, captives from raids, crushing the spirits of slaves and drafting them, and having children of their own. They also add to their ranks by attracting neer-do-wells across the wastes. It's a rough life, but raiders do sometimes have kids and families with them in the band, even if they don't always take them on raiding missions.

And because no good question can have a true answer, here are four more, from **Albert**.

My interest in the raiders has been perked. Specifically, I'm wondering about their culture (if you can call it that).

First off, I'm going to include a section on the Vipers that I found in some old design documentation by Scott Campbell; the Khans you already met in Fallout 1, but the Vipers are the other side of the coin. It may help answer some of your questions - basically, raiders are a pretty varied bunch.

1. What sort of religion, or at least superstitions, do raiders have?

It varies - there's no one overall religion for all raiders. Some have none at all (Khans) while others (the Vipers) are zealots. In some regions of Fallout, "raiders" blur into "tribals," so there are raiding bands of tribals that have a number of bizarre customs, including eating fallen opponents, ancestor worship, sun/nature worship, and so on. Usually, however, raiders are just violent assholes begging to be shot.

2. Do they have any real culture or customs? I know that raiders like the Vikings and Monogolians did.

Again, it varies, depending on the raider band and depending on the region. It can be something as simple as survival of the fittest, with the strongest raider ruling everyone else (Garl), and occasional codes of

conduct such as "never surrender to the law," "never leave witnesses," "never bargain with a town or caravan master," to a complex set of customs and rituals (such as the Vipers).

3. On the subject of their families, do raiders ever marry (or have an equivalent to it). You mentioned that they would have families, but if both ma and pa are out on a raid, who takes care of the kids? Does someone stay behind?

They can marry, if they choose to honor frontier law or follow a religion, but others simply take mates or partners for a period of time, then switch around - on occasion, the leader of a raider band has the sole pick of any members of the (usually) opposite sex in the camp. Some raider bands take women and children from towns in the wastes, or from caravans, which keeps their numbers up. Over time, these slaves become assimilated into the band - often they have nowhere else to go. This happens in slaver bands as well.

As for kids, if they can carry a gun and shoot it, they are *sometimes* brought with the raiders, to teach the young ones about the "life" early - in some raider bands, going on the first raid is a rite of passage for children. Younger children are left back at the camp with a few of the raiders - not all raiders always participate in an attack.

4. How do they minimize violence and infighting in their camps?

Depends - some camps don't, which is probably why there's not a larger amount of raiders prowling the wastes. Usually the presence of a strong leader prevents arguments from erupting too frequently - or allows for controlled violence, where disputes are settled before the leader, usually with a fist or knife fight. Furthermore, it's in the raiders interest to police their own - the life of a raider is tenuous, and troublemakers need to be dealt with swiftly.

Furthermore, a number of raiders are free to sate their violent urges on the towns and caravans they prey on, which helps a bit. Otherwise, violence and infighting usually comes down to fist or knife fights in camp (especially if alcohol or drugs are present), and either no lasting wounds are inflicted, or else they are fights to the death, and the loser is left to die in the wastes.

RAIDERS IN GENERAL

In some ancient design documentation that I think was written by Scott Campbell, one of the original designers (I'm still checking if it was him, so I may need to print a retraction on the credits), there was actually supposed to be three groups of raiders: The Jackals, the Khans, and the Vipers. Not only did they raid local towns and caravans, but they also preyed on each other - as you'll see from the descriptions below, their behavior and habits in F1 dictated (or were dictated by) their name choice.

The Jackals: The first clan, the Jackals, is your typical group of crazies. They have no morals except one: survival. They use group tactics to overmatch their enemies. They are craven cowards, though, and will not attack unless they know they can win. They band together in their hideaway and fight over the spoils.

The Vipers: The second clan, the Vipers, are mysterious followers of an ancient religion (or so they claim). They usually only come out at night to hunt for food or to conduct raids. They are very ruthless when it comes to combat. They prefer stealth to strength. They usually carry bone knives dipped in Pit Viper venom. This poison, when in the blood stream, paralyzes the victim. Most victims captured in this way are taken back to their hideout.

The Khans: The last group, the Khans, is probably the most dangerous. They live the lifestyles of Mongol warriors, raiding towns, burning what they cannot take and capturing the survivors for use as slaves. They usually travel in small scouting bands, but sometimes they roam as full war parties. The Khans above all else respect strength. They

are eager in combat to prove their worthiness to the clan by engaging in hand to hand combat with fists or clubs. The Khans carry very few firearms (since they are for cowards). Anyone showing superior strength is worthy of their respect. The leader of the Khans is so because no one has beaten him in combat.

One interesting thing listed in the original documentation is that all raider bands were supposedly all from Vault 15 after it opened, but they all splintered off into different groups from the overpopulated Vault.

All of these raider groups officially exist in the Fallout universe, though only the Khans are in southern California at the start of Fallout 1. The handful of Vipers that survived Rhombus' campaign of extermination in 2155 fled North and East, following the same path the Jackals took after they had their asses handed to them by the Khans thirty years before.

THE VIPERS

Let's focus on the Vipers. Again, credit for the Vipers goes to Scott Campbell, I believe, currently at Contraband Entertainment, Inc. Look for their fine products wherever computer games are sold, and you will be supporting one of the souls of Fallout development.

BTW, no huge mutated Pit Vipers actually showed up in Fallout 1, so don't worry that you missed them.

The leader of the Vipers, Asp, conducts their ceremonies and administers duties. The members of the clan will follow his orders even if it meant death. Asp is usually in the same type of bone armor as the others, save he wears a snake skull as a helmet adorned with feathers and snakeskin as a cape.

The Vipers are always dressed in bone armor. This armor, as the name implies, is made from strips of bone bundled around the body with strips of leather. All viper clan members have crude tattoos all over their bodies. Exotic piercings are not uncommon. The Vipers usually carry bone knives, bone spears, and sometimes pistols.

The Vipers hideout, or as they call it "The Shrine," is many small adobe buildings surrounding a large pit. This pit is where they conduct their religious ceremonies. The sacrifices are placed within the pit and several huge Pit Vipers slither out to claim their meal. Although it has never happened, if anyone were to escape the pit, the Vipers would let that individual go, claiming it was the will of the great Snake.

Aside from Asp, there is at least one other personality mentioned as belonging to the Vipers' band, a woman named **Cobra**, a "Brewer" of the Viper clan, responsible for making the snake venom (or extracting it from the Pit Vipers), she has a son named **Fang**, and her husband died long ago.

In the original design documentation, there was an adventure seed for any characters coming across Garl from the Khans - he would task the player to go kill Asp and take his ceremonial helmet and dagger. Although Garl prefers the direct approach, he knows the Vipers rival the Khans in strength, and if Asp is killed, it has a good chance of scattering the Vipers.

Animosity: Both the Khans and the Jackals hate the Vipers, but the Khans and Jackals hate each other more than the Vipers, so there is a nice little hatred pecking order going on.

Note: Some of the information below is dated, obviously, and does not reflect everything that happened in Fallout. I'm just including the original text so you can see it in all its glory.

Background: 64 years ago, a man named Jonathan Faust led his group of about 200 people from the overcrowded Vault into the wastes of the outside. It was there that his small band came to a small oasis in the middle of the desert. In the middle of this oasis was a large pit, almost like a crater. While resting and setting up camp, Faust decided to look into the pit. Darkness greeted him.

When a member of the band called out to him, Faust turned, startled, and slipped into the Pit. He slid down twenty feet and then fell another 20 and broke his leg in the process. As he lay there dazed, a half dozen gigantic Pit Vipers slithered toward him. Not knowing what these things were, Faust was terrified. The group above heard one loud scream and then nothing. Three others went to look for him, but never came out.

The small band, leaderless and stuck in the desert with no food and water, decided to stay at the oasis, at least for a little while. They covered the pit with a tarp and nailed spikes around it to keep whatever horror lived there encased there. They then set up their camp as far from the Pit as possible. Whatever was down in the Pit never bothered them.

Days passed. The more influential of the group argued about what they were to do. There was talk of joining up with others from the Vault. There was talk about going back to the Vault.

During these four days, almost $\frac{1}{4}$ of the group was either dying or already dead. Those who survived the radiation poisoning were too weak to travel, while those who survived either left or stayed and helped defend the little settlement against the desert creatures.

Finally, after a week, the remaining members of the group decided to move on. They started to pack their belongings when an almost spectral figure emerged from the shadows. It was Faust, except this was not the strong leader they remembered. He was wan, pale, and emaciated, and there was a feverish gleam in his eyes. He told them that when he was down in the pit, a god visited him and told him the True Way. They would make sacrifices to the Gods of the Pit, and wealth and happiness would be theirs.

Of course, everyone was skeptical. Some were even violently rebellious, saying that Faust was crazy. After Faust patiently listened to them, he then whistled, and from behind him, came two very large Pit Vipers. Without warning, they struck. They attacked everyone in the group, including Faust, but he just laughed as they bit his flesh.

As the sun rose the next day, the two snakes lay dead by Faust's hands. Half of his people were dead, the other half were on the brink of death as the Pit Venom started to sink into their systems. By that afternoon most would be dead, but the forty or so survivors of the venom were half crazy with the aftereffects of the venom. Faust, himself immune to the venom, helped the remaining few through this time, which has come to be known as the Great Awakening. He whispered things to them, told them how the Great Snake has spared their lives, so that they would fight for His mighty cause.

And thus the Viper clan was born. They decided to make the Pit their Shrine, and to go out into the wastes and take what they needed from those blasphemers that did not follow the Winding Way of the Great Snake.

When Faust (or the Great Snakekeeper, as he was called), grew too old to rule, his son, Asp, was given the sacred role of leader and High Priest. He has ruled ever since.

Dress: Vipers typically dress in bone armor with a red sash, and their elite warriors are called the Crimson Tongue.

Rituals: Once a month, the Vipers fall into a deep trance through a dangerous mixture of alcohol and snake venom (anyone who doesn't awake is considered to have been found unworthy by the Great Snake).

When the Vipers reach manhood, they are given a special mixture of the Pit Viper venom. Those who die (or are in a coma for more than seven nights) are given as sacrifices to the Children. (The snakes in the Pit are officially called the Children of the Great Snake.) Those who survive the week-long delirium become Warriors of the Snake (also called Chosen Ones).

There is also a monthly ritual, where the Venom is taken by the High Priests and Priestesses of the tribe in small quantities, which causes bizarre dreams. This is called the Time of the Summoning, because many claim to see the Great Snake come to them in their dreams.

When it is time for a captured prisoner to be sacrificed, he is typically hurled into the Pit at midnight.

Camp Breakdowns:

The Pit: This is the large pit that lies in the center of the Viper's camp. It currently holds four giant Pit Vipers. Each one is old and very well fed, but they are still very deadly. The Pit itself branches off into many tunnels, where the player can find Faust's old staff, as well as many nests of rats. One of the tunnels opens up into a secret exit near the mountains, so a resourceful player could use it to escape after being hurled into the Pit.

The Sanctuary: This is where Asp sleeps and attends to the governmental duties of his people. His mate, the High Priestess of the Great Snake, is always close by. They have no children. The meeting room itself is long and lined with torches. The throne Asp sits on was made from the skulls and bones of the two snakes that Faust killed during the Great Awakening.

The Cages: Where the prisoners are kept. Located at the very edge of the Oasis (they cannot taint the snakes with the unbelievers), these pits are dug into the ground. Their entrances are made of iron grates set into the stone ground of the oasis. They are usually guarded by the Crimson Tongue, the special elite warriors. The reason they are used to guard this is because a lot of the time the Cages are used to hold the sacrifices to the Children.

The Hall of Ascension: This is the ceremonial lodge used in the Time of Summoning. This is also used for all religious purposes, except the Snake Sacrifice, which is done on a platform set up over the Pit.

So there you are - all I could dig up on the Vipers. Officially, they exist in the Fallout universe, but they'll differ from the description above in the following ways:

- The Vipers are from Vault 15.
- Mutated snakes *do* exist in the Fallout universe. Watch where you step.
- The Vipers' leader's name is unknown, but he was the first to discover the hallucinogenic effects of the mutated vipers. Anyone else injected with the undiluted venom either dies or goes into a coma.
- The Vipers have no stable location. They wander the wastes, the mass of snakes carried with them in a massive steel drum supported by slaves and brahmin.

- The Vipers left Southern California after two incidents:

1. Defeat at the Hub in 2125: Their failed attempt to raid the Hub during the Hub's formative years, stopped almost solely by Angus, the founder of the Hub. Angus' defense caused the Vipers to retreat north, and they roamed the wastes for many, many years, occasionally attacking caravans and small settlements. Around the early 2150s, however, the Vipers had grown to their former strength from captured slaves and caravan drivers and had begun to establish a power base in the badlands to the North of the Hub (and south of the Lost Hills Bunker). Driven by a religious frenzy (and the need to provide for their much larger numbers of soldiers and disciples), they began raiding more frequently than before, attracting the attention of the Brotherhood of Steel. The Brotherhood sent out a few squads of scouts to track the raiders down - it was more of a training exercise conducted by John Maxson's father, as the Brotherhood was convinced that small detachment of troops in Power Armor would be sufficient to deal with a group of raiders, no matter how large.

2. Near Extermination by the Brotherhood of Steel in 2155: One Brotherhood squad found the Vipers, and during the firefight, John Maxson's father (who was leading the squad) was killed with a poisoned arrow. The response from the Brotherhood was immediate. The Paladins, now led by Rhombus, began a full scale campaign against the Vipers, tracking them down and wiping out almost all of their members within the span of a month. A handful of Vipers were able to flee north and east into the mountain range, but they were never heard from again.

During the campaign, the Brotherhood sent a few scouts and emissaries to the Hub to track down Vipers members, and from these beginnings, the Hub and the Brotherhood began full trade relations (caravans had delivered to the Brotherhood before, but not long after the destruction of the Vipers, caravan trains ran directly from the Hub to the Brotherhood on a regular basis). So some good did come out of the Vipers' presence in the wastes, for what it's worth.

Three questions from Ramon Dexter, transmitted via DJ Slamák (I'm checking on the other ones, Ramon):

1) Are the Fallout locations made according to real places, or did you make them up? I mean specifically the Hub, Junktown, Gecko a Modoc.

Some are based on real places (Necropolis = Bakersfield, Klamath = Klamath Falls, Redding = Redding), but the Hub, Junktown, and Gecko were all made-up locations.

Modoc most likely took its name from the Modoc National Forest located near the location. "Modoc" was originally the name of an Indian tribe in the region, I believe. Arroyo is a fictional locale, according to Tim Cain.

2) Does the Fallout 1 Military Base exist?

According to Chris Taylor, Mariposa Military Base is based on Fort Ord, IIRC. That's an old military base that has been shut down near Monterey Bay.

3) What happened to inhabitants of Los Angeles when the bombs dropped?

According to Fallout's very own **Chris Taylor**:

This isn't canon, but I had always imagined that LA was pretty much decimated (which is 1 killed out of every 10, thanks Romans!). Most people in LA died after the bombs dropped, due to radiation poisoning, disease, famine and each other. Most of the people in the demonstration Vault left and of those that remained, most became the Master's servants and members of the Children of the Cathedral. Those that left could be part of

almost any organization in LA. The majority of people in LA would have to be people who came to the city *after* the destruction. Most to scavenge what they could, be it equipment, food or people.

...and based on what I could dig up from the old design documentation, this is pretty much what's written there for the Los Angeles area.

One from **Classic316** (via **Kreegle**):

X. You said in the Fallout Bible, that Ghouls still live in Necropolis, but in the manual, it is written that the city was completely wiped out (The bad thing that happens if you don't take out the Military Base in time.) I find this odd since I assumed FO2 continued with the assumptions that the Vault Dweller more or less did everything the "Best" way possible in Fallout 1 (Such as taking out the base in time) Perhaps I'm misunderstanding something here, which is not too unlikely considering how long it's been since I've had time to play the game, so anything to help clear up this little question of mine is appreciated.

I am wrong. Most ghouls were forced to leave Necropolis, leading to the Great Migration across the wastes. I will print retractions later.

Some questions from **Dane Zarbano**:

1. What happened to Sgt. Granite and his crew after the destruction of the Enclave?

He and the EC crew hopped aboard the tanker, and escaped to the mainland after watching the fireworks from the top of the tanker, whispering "gawd-damn" to themselves and throwing suggestive glances at the women from Vault 13 and Arroyo. After reaching the mainland, they headed north to Navarro (or the remains of Navarro, depending on how your PC left it) and were never heard from again, though their adventures could fill several eras worth of pulp comics, including a recent re-appearance in Keith Giffen's resurrection of *Suicide Squad*.

2. How was the Brotherhood of Steel involved with NCR after the destruction of the Enclave?

Unknown. Presumably, they'd already established *some* level of co-existence with NCR even before the events of F1, judging by one of the states of NCR being dubbed "Maxson" (more on that in a future update except to say that the Lost Hills Bunker was NOT turned into a town in NCR) and considering their pre-existing ties to the Hub, which became a state by the time of F2. I've always imagined that NCR and BOS have maintained an uneasy truce, with barter and (some) technology sharing between the two groups.

3. What happened to the doctor guy who released the modified FEV virus into the EC's air ducts?

Devastated in the wake of finding his moral center, he did not inoculate himself. When he released the toxin, it is believed he died with the rest of the EC, but his body was never found.

4. What happened to...

a. Skynet

Skynet's fate is undocumented. If I was to speculate, he left the player and began to travel west into the wasteland, looking for terminals and data to acquire more knowledge, collect more data, and perhaps "settle down" in a mainframe. The frame he was in, and the brain he had could only store so much information, and AIs need more data storage space to grow in order to evolve. It is possible he made his way to the

Glow, but it's not known for sure. Any fan writers out there, feel free to round out what happened to him - considering his combat messages alone, the world's in for some shakin'.

In the official universe, Skynet is not his real name. Like some other aspects in the Sierra Army Depot (i.e., the news reports), it needs to be revised into the timeline. Sue me.

b. Marcus

Marcus went east to try to find the remnants of the Master's Army:

MARCUS

Inspired by the example set by the Chosen One, Marcus eventually traveled across the great mountains to the east, searching for other refugees from the Master's army. You never heard from him again.

c. Goris

No one knows. He is the last of his kind, a tortured soul in a kingdom of ruins. Can you hear him howling in the darkness at the edge of the firelight? Of course you can. Shed not a tear for brave Goris – he has served the good people of the wastes, and now his time is done. See below for more information.

d. K-9 (from Navarro)

After getting his motivator repaired, K-9 was left in NCR by the Chosen One so that he could receive necessary repairs from Dorothy and, not long after his recovery, Dr. Henry (who had been placed in critical condition after being reportedly assaulted by the Chosen One some time earlier). Dr. Henry, afraid that too much information about the Enclave would be obtained from K-9, attempted to destroy the cyborg, but was stopped by cyberdog and Dorothy, who suspected what Dr. Henry was planning. The NCR government used the attack as an excuse to confiscate K-9 and cyberdog in order to learn more information about the Enclave as well as what makes the two of them "tick." At last report (and over Dorothy's objections), K-9 and cyberdog were disassembled and analyzed. Structural damage during the disassembling is reported to have killed them both.

e. Xarn the Intelligent Deathclaw from Navarro

According to F2 designer John Deiley, Xarn was supposed to go back to Vault 13 and warn the Vault about Horrigan's attack, but he never made it (in the original design, he was supposed to be able to go back and save all the deathclaws and warn them about the Enclave, but this didn't make it in). He was last seen wandering east into the wastes toward Vault 13 - he never made it, however, so his final destination is unknown.

5. So if supermutants can now reproduce...

They can't. Marcus was joking in New Reno. Super mutants are sterile. Blame me for another episode of bad humor, oh cruel reader.

...Goris and Xarn can perpetuate the intelligent deathclaw race, and new ghouls are being made from over-radiated people dying...

Goris and Xarn did not perpetuate the race – they are the last of their kind. See below.

...that would mean Humans, Supermutants, Ghouls, and Intelligent Deathclaws would be major races in New California right?

Not as of the end of Fallout 2, no. The predominant and most accepted race in NCR is human (and probably will be for generations). While super mutants and ghouls are tolerated (although some gain true acceptance, especially in the military and in the NCR Rangers), deathclaws of any intelligence would not be, assuming any significant number survived the Enclave's massacre at Vault 13, which they didn't.

One from Killian:

Belief system. From the looks of FO/FO2 everything seems pretty non denom but there are still allusions to xianity. Any generally accepted ideology in the wastes? I'm assuming it would be monotheistic? Any interesting tribal religions you'd care to elaborate more on? How about clearing up some of Hakunin's gibberish? (side question: Where's the name Hakunin from? Not any relation to Bakunin I hope though I guess Hakunin looks a bit like Bakunin post-scurvy)

All the basic belief Pre-War systems are probably still out there, but they haven't been addressed in any Fallout game out of fear of riling the masses - the Hubologists is probably the closest we ever got, and even they are an amazing coincidence to a contemporary religion. As a result, there's probably not much point on speculating on them except to say they probably survived in some fashion. Individual designers may end up resurrecting other religions if necessary to create controversy and screaming matches in the newspapers and message boards.

In my opinion, the entire spectrum of Christianity still exists, and has scattered into even more splinter groups. Mormonism still exists, since it was hard to nuke all of Utah, and Mormons are pretty hardy folk.

Father Tully in New Reno wasn't really a priest, obviously, and Jo in Modoc was a "minister" of sorts, but neither one was a representative of a real world religion. In the original documentation, Tully was supposed to be from the Abbey, but they drove him out after he accidentally set fire to one of their libraries.

There are no tribal religions anywhere in the documentation except for the Vipers above, so anything I added would just be speculation. There are some out there – as much as Arroyo had a whole ancestor-worship thing going on, there are probably radscorpion / sun / sand / volcano / storm / chem / spore plant / radiation-worshippers out there.

Hakunin's Gibberish: Don't know where his name comes from. If Hakunin was part of the original F2 design, Tim Cain might know. I'll ask him at some point. His gibberish is probably due to a constant barrage of mind-altering chemicals he's been taking in his role as shaman. He's pretty whacked.

Game logic reasons, however, dictate that because Hakunin's text was written by Mark O' Green, that he speaks the way he does because Mark has a talent and passion for inventing cool ways of speaking for NPCs (Set's lingo, for example, Bonenose's whole Jamaican dealio), and he does it because it's fun. Let's give it up for Mark O' Green, people.

Oh, and there are plenty of cults in the wasteland. Watch out for them, because usually they don't like you and what you're thinking.

What's the family structure like in the Fallout universe? From most of the examples we've seen it looks like it sticks to the typical nuclear family or in more than usual cases, single parent homes (due to mortality rate in the wastes, I'd assume.)

I imagine it varies according to region (there's no documentation for this), but it would mostly be nuclear families and possibly a commune here and there or some sort of group-rearing village. In situations where the genre wants to drive home the 1950s aesthetic, nuclear families are especially common.

Racism. We've seen "city dweller" vs "spear chucker" discrimination in the Fallout world but is there any sort of racism? Aside from human vs mutant I mean :] I figure a

catastrophic event like the great war would bring people together.

There's no documentation on this, but aside from the obvious mutant-ghoul-human and cultural bigotry (tribals vs. townsfolk, Vault City vs. everyone else), racism and sexism (and this is just in my opinion) would be alive and well. A person's skin color, status, and career are always good excuses for fear and hate to build upon. I imagine communities like NCR and Modoc would have less of a problem with this. The Great War may have brought some communities together, but it also made isolated communities as well. Even in Fallout 1, Shady Sands hated the Hub, was suspicious of Junktown, and there was quite a few groups suspicious of the Brotherhood, etc, etc. There's lot of potential for sowing the seeds of hate in Fallout, so buckle up, everyone. It's not one big happy family out there. Let the flames begin.

As a final note, I always thought it was kind of cool that there was lots of female Enclave soldiers, and I liked that the initial design team made Lynette head of Vault City (and in a nice twist, had her in favor of slavery to give the player more to chew on). The culture of the world got shook up in interesting ways.

Something **Mr. Frosty** wanted to know:

I'd really like to know this. Why did they become tribals in such a short time? Religious reasons? Drugs? My problem with tribals is not their lack of technology -- which is vaguely plausible -- or their tribal structure -- which I don't object to at all. My problem is that the nature of their tribal cultural is ridiculous -- it makes no sense that post-Apocalyptic Americans would degenerate into pre-Columbian natives.

If you're looking for plausibility in Fallout 1 and 2, you're bound to find holes, and there's not a concrete explanation for each one - and sometimes, you'll even find multiple explanations that contradict each other. The decision to make the Arroyo culture "tribals" was most likely a game logic/thematic one (as plot devices tend to be). There was a certain atmosphere that the F2 initial design team established with the tribal culture in Fallout 2, and I think they just wanted to play around with the fact that the player was from a primitive, non-technological, ancestor-worshipping culture. It was a way of bringing the history of the Vault Dweller from the past into the present, and provides a nice backdrop for the events in the game.

Also, one issue (raised in Killian's question above) is that many of the voice-acted dialogues were done by Mark O' Green, who likes to play with language and culture with the characters. Personally, I like what he did with Set, Sulik, the Elder, Hakunin, and the whole batch of them. Sure, they're bizarre, and they make you wonder about the culture of the world you're in, but I think that's a strength, not a drawback.

Here's one from **John/OTB**.

Something came up recently regarding one of the denizens of Vault City, namely Thomas Moore. The question is pretty simple: is he a reference to the author of Utopia?

Leonard Boyarsky (the original F2 designer who made Moore) says it was most likely a reference to Chad Moore, one of the Interplay artists at the time.

One from **Alin Sfetcu / Sanctuary**:

1. Why the doctor for Vault City (the one inside the vault) ask you to bring his a dose of Jet ? For his personal use or for research ? This is some sort of quest or i'ts a deadend ?

Doctor Troy wants the Jet so he can create an antidote for it, though at first glance it appears like he's nursing a habit. It's a quest.

Here's some from **DoPr, Mat, and Cervantes** (I tried to email this answer to you guys, but I got bounced, so you may be seeing this for the first time):

First of all thanks for answering my question. Finally I know some more about Boyarsky's history. :-) Besides it was a nice news on my (and my friends) site. :-)) Any way, you encouraged me to mail some more questions:

1. The citizens of San Francisco often fight with knives called "Shiv". I tried to use them, but it was impossible.

They're really shitty daggers - basically, their big claim to fame was supposed to be (1) they would never be detected as a weapon in hand if you approached someone (or entered a boxing match, or fought in the ring against LoPan), and (2) they were easy to conceal in case anyone searched you. There wasn't a way to pull off the "see no evil" power, so we didn't implement it. As for being "searched," you don't get searched anywhere in the game (except at the Vault City), so the shivs just ended up being really crappy knives - still, there was plenty of places where shivs were thematically appropriate (New Reno), so they're lying around in people's inventory.

2. Is it true, that Holly Hand Grenade can be found in a regular encounter with a cave full of enemies?

I checked with Jason Suinn, the random encounter designer from F2 (he also designed the encounter with King Arthur). He says he doesn't think so - it's only available after the King Arthur encounter, in a cave with an extremely dangerous rat.

We could be wrong and one may be accidentally placed somewhere (we're still finding the solar scorcher in strange places). If you guys have a savegame where this happens, let us know.

3. Why Miria (and I guess Davin too) don't promote to higher levels?

Because they're terrible NPCs. Basically, they were intended as a burden rather than a force to be reckoned with.

4. In NCR there is a doctor (I don't remember his name) that works on an antidote for mutants. Unfortunately the antidote is lethal. I'm curious who is that guy because, according to the dialog, he seems to come from Enclave... or maybe he was just working there?

Dr. Henry used to work with the Enclave cyber-genetic research program at the Poseidon oil rig and at various other Enclave installations. In NCR, Dr. Henry claims he left because he felt his "work wasn't being appreciated," which is true: his theories on correcting the mutation in the Wasteland population were not popular with the rest of the Enclave scientists, most notably one of his colleagues, Dr. Schreber, who he worked with jointly on many genetic research projects in the past. Dr. Henry was arguing with Schreber at the Navarro base about the mutation problem for the five billionth time when Schreber, in a fit of anger, told Henry he was going to recommend that Henry be transferred to another Enclave facility where he would be put to work on cybernetic maintenance (the equivalent of cybernetic janitorial duty). Henry took the threat very seriously, and within hours, Dr. Henry stole a cybernetic dog (cyberdog) and slipped away from the Navarro facility, heading east and eventually making his way to NCR. The Enclave, while not pleased with his attitude and the directions of his research, were not happy with his escape (they need all the scientists they can get), and several soldiers were punished for negligence. Schreber never confessed to his role in Henry's disappearance, and simply claimed that Dr. Henry had been acting suspicious for some time, and was displaying "sympathies for the mainland mutants."

5. Why such a large city like San Francisco is not so well known as Vault City? The people there didn't seem to isolate like VC citizens. I also don't understand why San Fran was avoided by caravans though there was a lot of good stuff to buy.

It is actually well known (at least in the South), you just don't see the caravans from San Francisco. San Francisco trades fish to other cities in the wasteland. Mmmm, fish.

6. Now a question about Brotherhood of Steel. How did they know my hero's name??? :-)

They're psychic, can read minds, consume human beings and absorb their thoughts, and neurolink to computers like the Master. No secret is safe from them.

I also have two more questions, but they are not exactly from me. Some people sent such questions to my site and now I have opportunity to finally find the answer.

The first question seems to be a "walk through question" but I'll ask it anyway. :-) So... A guy named "Mat" asked about the second excavator chip in Redding. Is there any way to sell both chips?

There should only be one chip. If there are two, then that's a bug. Let me know where you find the second one.

The second question is a real mystery for me, because I only managed to verify that part of it. Someone called "Cervantes" asked about the sixth toe gained in Toxic Caves, which can be removed in Vault City. That part is clear but now is something interesting... Cervantes says, that after he finished the game whores in New Reno kept saying: "You really should use the mutated toe on Horrigan" (to get full amount of points). Is it true or is Cervantes just pulling my leg? :-]

It's just a joke; don't do it. It doesn't do anything. Don't eat the toe, either, since I believe it poisons you.

A couple from **Tom**:

1. Whatever happened to the inhabitants of The Sierra Army depot?

General Clifton and his troops evacuated the base (sometime between July 10, 2077 and late October, 2077) and went to join the remaining troops in neighboring installations or sent to the front lines in China or Anchorage on a plane or ship before their lives were reduced to ash by a rain of nuclear fire.

2. Who were the Sierra Army Depot soldiers attacked by? Since when u get the robot to take out his body from a tube he says "I got to get back to my squad!" Sadly he dies.

They were attacked either by hungry or striking rioters in the United States (unlikely from Dobbs' description, however), or they were deployed to China or Alaska, where they fought the Chinese. Dobbs' unit was in Alaska when he was wounded and dumped in the meat wagon.

3. Why does he have a Red Ryder LE? I never used the beebie guns because I thought they were weak. Were the enemies weak or something?

The fact he is carrying the BB gun is a joke (as well as the fact that he dies from post-cryogenic syndrome a few seconds after popping out of the tank), but the gun itself isn't very funny to anyone you shoot in the eye with it. It has a high chance of doing some blood-curdling criticals and consistently does 25 points of damage with every hit, I believe.

Two from **Sergeant Josh Grant**, whose current tour of duty is Lead Tester on *Icwind Dale 2*, and has had nothing but pleasing things to say about my design ability and comparing it to the grace and style of a drunken monkey on a typewriter with several keys missing:

1) The Fo1 manual has an ad in the back for a GECK. When this ad was placed in the manual, was it already known that this would be the key item in Fo2, or was it just coincidental?

No - from what Chris Taylor tells me, the GECK was created by Jason Anderson and Leonard Boyarsky for the F1 manual - it wasn't intended to be used in Fallout 2. But as far as a McGuffin goes, it was there when it was needed. Hello, game logic.

2) Can the Fo1 vault dweller ever beat ZAX at chess?

From **Jess Heinig**, one of the *Fallout 1* programmers, designers, and the one responsible for writing the loveable machine intelligence:

To beat ZAX in chess, you must score a critical success on an Intelligence check, *and* ZAX must fail its check. Very, very rare circumstance. As I recall it might be scripted so that it's also only possible if a character has a 10 INT, but I may be mistaken -- it's been a while. None of the skills, except perhaps Gambling, seemed really appropriate, so I decided to go with straight stat check.

Some from **Michael Jeppesen**:

1. Once I ask Butch from the Far Go Traders in the Hub about the Maltese Falcon, and he mentioned a girl named Hope, a singer at the Maltese Falcon. When I looked at your newly released concept art at Vault13.net, I noticed a character named Hope. I've never been able to find this girl in the game. Why not? What role should this character have played?

According to Scott Campbell, one of the original designers for Fallout 1, Hope was supposed to be a singer at the Maltese Falcon who was supposed to have some adventure seeds with the Hub underworld. It didn't make it into the game, and there's no more information on her, unfortunately.

2. What do you need to do to save the Hub from being slaughtered by the fleeing mutants in the end scene? I've finished Fallout 1 once where the Hub survived the attack, and twice where it was slaughtered; but to the best of my knowledge I did nothing different when playing the game the second and the third time!

Beats me; I've forgotten. I think it's a time issue. If anyone out there reading this remembers, let me know. It could be a bug.

One from **Dmitri Polioutinne** (not from his mother, **Nina Pastoukhova**):

X. I've read all the updates and still I'm curious about one thing. Why the Sierra Army Depot is not mentioned at all? I think the Sierra Army Depot is not an insignificant part of the game's plot. Just on the contrary I believe that it has something to do with the F.E.V. experiments or with development of futuristic weapons and armor. It doesn't look like it's just a weapons storage facility. Otherwise why was it inserted into the game if it has no particular reason?(or a place where one can find some stuff to sell and gain an NPC(probably one of the best)) So my question is: What is the role of the Sierra Army Depot in Fallout and what it has to do with the F.E.V. experiments and weaponry development or maybe some kind of an artificial intelligence development?

First of all, the Sierra Army Depot was intended to be a bonus location for the game, just a place to adventure that wasn't tied to the main plot (kind of like the EPA, Abbey, and the Primitive Village were supposed to be), except it made it in (as did Modoc, New Reno, and to an extent, the Military Base, which, while it helps support the plot, isn't critical path).

The Sierra Army Depot was used for the following (primarily taken from *Sierra Mission Statement Holodisk*):

1. From 1942 - 1991, it was responsible for storing various military munitions. This is true.

2. From 1992 - 2050, it was responsible for disposing much of the obsolete munitions in storage. This is true.

3. From 2050 - 2076 is when the place started getting creepy. It became a classified facility for robotic research and development, and biological and conventional weapon testing. Skynet (constructed primarily for research purposes) went on line in 2050, and it is possible that the intelligence arranged all of this, but unlikely.

Again, Skynet is not its real name.

Robotic Research: Skynet is the first machine intelligence to be developed in the Depot, and it was conceived in 2050 (it didn't actually become aware until 2075, and it *really* started cranking on developing a cybernetic brain to help it gain mobility). In July of 2077, Skynet was "copied," creating two versions, one to run the defenses and the other one to sit in the lab and wait for the researchers to come back and help it finish the fucking cybernetic brain it had spent so long developing.

BTW, the dates that Skynet lists for its awareness and "final instructions" in Fallout 2 are incorrect. It became self-aware in 2075, and it was abandoned sometime in late July to early October in 2077. It is believed that the dates and other numerical data within the facility may be suffering from some damage or numeric decay in the base's internal clock.

Biological Research: In addition to biological weapons and drug testing, the Sierra Army Depot performed many illegal experimentations on prisoners of war and military prisoners (especially U.S. military prisoners and deserters – the ones that weren't used to "stock" robobrain, however), attempting to enhance their intelligence and fighting skills, but the chemical cocktails that the Sierra Depot crew were feeding their subjects had nothing to do with the FEV research taking place in West Tek and the Mariposa facility. Many of the brains extracted in the Sierra Army Depot found their way into Robobrain throughout the U.S. military.

Furthermore, the Sierra Army Depot kept many prisoners and soldiers in stasis, most likely for medical or testing purposes (such as Private Dobbs).

4. 2077 is when Skynet was made into a "multiple personality" in order to oversee defense of the Sierra Depot as General Clifton and his command pulled out of the base. It has been sitting there in the darkness ever since, illuminated by tiny blinking red diodes and the whirring of magnetic tape reels.

And because as mentioned before, no good question can ever truly have an answer, here's another follow up from **Dmitri Polioutinne**:

X. Besides I want to be aware of one more thing.(Don't think I'm too insistent) Everybody's mentioning the EPA, the Abbey and the Primitive Tribe(Village). Is there any possibility of these additional locations ever being released or a crack to unpack them? The data of this locations is included into the Master.dat, if I'm not mistaken. So there must be a way to reveal them and make them playable, right? I guess you know how it is valuable for the fans.

There wasn't ever anything designed for these locations except for the 5-6 pages of the EPA summary which I've included below - the locations don't actually exist in a data file anywhere in a playable state or even a "50% finished" state. It's doubtful we'll ever make them or release them to the public.

Here's a common question I get; it's from **Evan Lally**.

THE SHORT ANSWER ON HOW TO BE A GAME DESIGNER

This last question isn't going to be in the final version of the Bible, BTW, I'm just posting it here since I get this question a lot.

I am an avid gamer and fan of roleplaying games that wishes to enter the industry, but have limited appreciation of graphic design and programming. My primary interest, instead, rests along the lines of story-line and world creation, in classic roleplaying fashion.

Now, this would seem to make entering the gaming industry difficult: few games really seem to have a great focus on excellent and well-executed storytelling, which would seem to note a limited demand. Further, how would I make contact with companies to establish myself? Fan fiction is a lovely thing, but I've never heard of a fan fiction writer being drafted, more or less, to work in a gaming company.

You can see my problem.

My questions are as such: what degrees or experience would be preferred if I am going to attempt entry as a story-line writer or level designer, as a story-line writer would likely also become? Additionally, how would I establish contacts within the industry or companies that would have need for interested and able writers?

Well, first off, if you're interested in story and world creation, I would recommend trying to get established in the pen and paper game industry or in books or novels - game design requires a love of game mechanics, lists, and tons upon tons of rule sets. If you're interested in computer game designing, then here's what we look for/what you should focus on:

1. A love of RPGs.
2. A critical eye for RPGs (and preferably, other games as well), including feel, interface, pacing, weapon balance, level design, and so on. Play a lot of them and be able to tell what you like and don't about each game. The more specific, the better.
3. Good design skills - not only do you notice the elements mentioned above, but you can also implement them well. Know and recognize game clichés.
4. Good writing skills - when not actually arguing and throwing feces at each other through our cage bars, a large portion of a game designer's job is design documentation or writing 5000 emails. That means you need good technical writing skills and an ability to organize your thoughts. You need to be able to pass a document off to audio, QA, marketing, the programming staff, and an artist, and they should be able to find out whatever information they need just by looking at the document.

If you want to prep for a job in the game design field, I'd suggest the following:

1. Play a lot of games and analyze what you like and don't like about them. If you interview for a game company, that'll always be part of the interview questions, and having smart answers ready beforehand helps them determine if you'll be a good developer or not.
2. You should play a lot of games, but just as importantly, watch a lot of *other* people play games. Pay attention to how the game is played, especially the interface and menus and the means by which the player interacts with the game. When you do, you'll quickly start seeing what irritates players and what they enjoy - keep a running log in your head of successful ideas used in games and what made them work.
3. If a game comes with level or map editors, play around with them, try out levels or scenarios with your friends and use that as an acid test for your work. There are tons of editors out there, like the level editors

for Quake, Starcraft, Warcraft, Arcanum, Neverwinter Nights, or any others you can get your hands on. Put your levels or mods up on the net, get critiques, and try to make a name for yourself as a good level or map designer before you even go to a game company - it helps when the interviewer's already seen your work on the internet and perhaps even played one of your levels.

4. Persistence and enthusiasm mean a lot in the game industry, so if you get knocked down once, just get back up and try again. You'll get noticed.

5. If you're looking for college classes to take, I'd suggest some creative writing courses, maybe a little bit of programming and art, and any classes that deal with interface design or layout for computer programs. Learn how to write critically and technically, and become familiar with Microsoft Word.

6. A lot of designers did not start out as designers. If you want a door into the game industry, try manual writing, web design, quality assurance, or any of a bunch of other jobs in the game industry. Make your interest in becoming a designer known, and if you have the skills, somebody should give you a chance.

P.S. I've a question for the Fallout Bible, by the way:

1) Most classic theories on nuclear war include a nuclear winter after the attack, where particulates in the atmosphere cause a substantial drop in temperature, along with snowing, freezing and the like. There is a 'Great Winter' listed in the Fallout timeline, but it doesn't immediately follow the nuclear exchange. Was or wasn't there a nuclear winter? If not, why not? If so, why wasn't it mentioned before? Mind, it is quite possible I missed mention of it. Presumably, though, it would have had some sustained impact on the world.

Nope, I just assumed there was a nuclear winter and that was a bad assumption - I just assumed with hundreds of bombs flying around a nuclear winter was pretty inevitable, but I don't think one ever occurred in the Fallout universe.

As for why not, I don't know enough about nuclear warfare at the moment to say why not - I'll make the assumption that the nuclear warheads used in the Fallout universe were of comparable tonnage to the nukes in the real world (early) 1950s era, in which case, many of them could have been used without causing a massive blackout. If someone out there with real nuclear warfare knowledge, however, can illuminate Evan and I, I'd appreciate it, and I'll make you the BIG WINNER for next time.

Some questions from **Per Jorner**:

About the Elder aftermath text: first it says she lived on "for many years", then that she "passed away a few months later". Is that an inconsistency, or did she live many years and then a few months and then she died? :)

She dies a few months after Arroyo is established, which takes many years, once they figure out how to make their GECK work.

2 questions (not the ones I'd most like the answers to, but just off the top of my head):

1. Could you dig up the floating dialogue that Melchior Sr. blurts in the Military Base?

Here you go; I only include it here, because when I run Fallout 2 in Windows NT, it flashes by too fast for me to read, so if anybody else out there is having the same problem, here you go:

Stop!

Approach no further! Melchior the Magnificent commands you.

Behold, I am the greatest magician in the world.

Tremble before the might of Melchior the Magnificent!

My pets will feast on your bones!

2. Is the Professor in Broken Hills the same as the missing Shi researcher mentioned in the biology database?

No. Professor Sheng is unaccounted for. Poor Professor Sheng.

3. In John Deiley's answer to a Goris question, the statement that "the intelligence gene was made male specific and dominant" doesn't make a lot of sense from a genetic standpoint, but I suppose that's science fiction.

Hey, I'm still trying to figure out how to explain the physics of the Hydroelectric Magnetosphere Regulator.

Oh, if you go through Vault City with an Intelligence of 4, you'll notice that your character won't always understand some of the bigger words the Vault Citizens are spitting out.

On the topic of real-world names in Fallout, I think they're neat. I like to open an atlas and look for places in Wasteland and Fallout 2, and it must be absolutely mind-boggling to be a Fallout 2 player and actually live in Klamath Falls or something.

I guess Tim & crew thought so, too, or they just felt like doing it for some other reason. I don't really know what the decision was behind it.

A thesis and a big "hey!" from Krzysztof Lis:

Hey!!

I just downloaded and read the two Bibles - part 0 and part 5, and I have some questions about Fallout...

Just wait 'til you read this update.

1) Why the cows in Fallout 2 when touched (to move them) are dropping down on the ground? Why does it happen after some 'shaking' which looks like taking damage from gunshot? Why is it not possible to move them all?

It's supposed to simulate the great sport of "cow-tipping."

2) Do perks like Sexpert or Kamasutra Master make any difference? There is not so many possibilities to have sex in Fallout 2. :-)

I *think* it allows you to automatically get the best response from Mrs. Bishop as well as allow you to become a Porn Star without a problem - Tom French (one of our programmers) set it up, so I'm not absolutely sure. It is of limited usefulness, and I wouldn't recommend taking it in a serious life-and-death game - or if you are a gaming munchkin.

3) What the hell happened to Vault 15??? [Two maps were included, showing the two versions of V15 side by side] The question is long and complex, so I added two images to the email to make it a bit more understandable...

(Since I'm not including the images, the images show Vault 15 from F1 and Vault 15 from F2 – obviously, there are some big structural differences.) Beats me. I'll ask the designer. It was probably changed because of designer caveat/privilege/whatever; there's no documentation on it.

However, if I recall correctly, Tandi does say that Vault 15 was occupied by NCR "a couple of years" before the Squatters drove out the guards. It's *possible* they did some excavation and maintenance over the past eighty years - especially while building NCR, but that WOULD BE GUESSING.

a) Do the 'original' people from community of Shady Sands come from Vault 15? President Tandi says something like: "We need some parts from our old Vault". Is she lying, or the Aradesh didn't want to tell the original Vault Dweller anything 'bout it. As far as I remember after telling him, that the character is from one Vault he says something like: "Wanderer, I shall believe you, for now" - the 'standard' answer.

Yes, most of them. There are exceptions, like Ian. I don't know why Aradesh didn't mention Vault 15; I suspect he tends to be pretty reserved and suspicious of strangers. As for "Wanderer, I shall believe you, for now," Aradesh is just commenting on that he's not sure whether he believes the player is from a Vault. It doesn't jive, I know, especially after you help his daughter, but there you are.

Just as a detour/side note into game logic so you can see it from a development perspective, voice acting is a double-edged sword. It's cool to hear the characters speaking, but it can cause problems, not just because of expense, but because (1) what you record is what you get, (2) it has to be done several months before the game ships so that audio can clean it and you can lip sync it to the characters, and (3) Ron Perlman is very scary in person. The problem occurs is that you can't always anticipate every spoken line of dialogue you may need for the game - that's why occasionally you'll get some "Tell Me About" responses for some of the spoken characters that do not have any voice attached to them.

Also, if you've ever wondered why certain voice acted characters in the Fallout game tell you to go to their assistants to receive rewards, that's why - it's easier to modify their non-voice-acted assistants than them.

i) If we're talking bout Aradesh, why does he look like General Maxson? Are they family or what??

I think they were both done by Scott Rodenheizer, and he has a certain style in how he sculpts heads - they may have even been the same head. I don't know.

b) Why the Vault 15 from F2 is not the Vault we remember from F1? I mean the following:

i) The cave entries look completely different. Check one of the images - the blue color (on both) shows the walls in F1, the green - in F2.

In F2 you can go into the cave from one of the houses in The Squat, or through the elevator in the mountain. In F1 there is only one way in - from old shack, through a manhole in the floor. There is also no mention about any mountain nor hill. So - what happened there??? You probably also noticed the differences in the caves' looks and 'construction' - some new halls and rooms were added.

To recap from above or below (images not replicated), I can't remember:

(Since I'm not including the images, the images show Vault 15 from F1 and Vault 15 from F2 – obviously, there are some big structural differences.) Beats me. I'll ask the designer. It was probably changed because of designer privilege; there's no documentation on it.

However, if I recall correctly, Tandi does say that Vault 15 was occupied by NCR "a couple of years" before the Squatters drove out the guards. It's *possible* they did some

excavation and maintenance over the past eighty years - especially while building NCR, but that WOULD BE GUESSING.

ii) The third level is also different. All the rocks were dug out - but how? In F1 you see slt: 'it is impossible to move the rocks, even with best explosives'. Does it mean: 'one person is unable to do that work, but many hands for many days may be able to do it'??

It's most likely a case of designer privilege/caveat/whatever. It's possible a mining and excavation team with drilling and excavation tools backed by the Republic working over several months can do it (since they were there for many decades before the squatters showed up) - but I don't know for sure; that's just a guess - or a "retro-explanation for something that defies explanation."

iii) In F1 there were two elevators. One on lvls 1-2, second - - from 2-3. It is NOT possible to rebuild the elevator shafts, or am I just mistaken?? ;-]

Again, a case of designer privilege/caveat/game logic; the designer most likely just needed them rebuilt, but it could have been done with ropes down the shafts. I imagine (and WARNING: this is speculation only) that if there had been an NCR excavation team, they may have gotten the shafts operational again somehow (especially to haul out heavy computer equipment, or to get heavy drilling equipment downstairs). But that would be reaching - I can't find any reason for the change, and there may not have been one except for the purposes of designer privilege/caveat/whatever.

4) Has Cassidy ever had a wife or girlfriend??

Tons. And sometimes both at the same time. It's why he has a bad heart.

5) What kind of tree is growing out of Harold's head? An oak, "the larch", or something else??

It's a completely new species of tree, no Pre-War equivalents, and it's never been classified. It's unique and special, just like Harold.

6) How about water creatures? Are there whales in Fallout universe? The crashed one surely existed. ;-] How about sharks, other fish species, lobsters (I think they should mutate similarly to RadScorpions)?

There's fish, seaweed, and algae, but no known sightings of other fishy creatures, including sharks and lobsters. If for fan fiction purposes you wanted to include lobsterosities like in *The Drawing of the Three*, knock yourself out.

Presumably, aquatic life probably fared better than most of the land-based species, but no one has done research on how FEV or radiation may have affected them, if at all.

Oh, the whale in F2 doesn't count, since it fell from orbit.

Some from **Michael Roellinghoff** (if I got your name wrong, I apologize).

I've been playing through FO2 again, and I noticed in the NCR Holodisk that there is reference to a number of cities, most of them are recognizable, except for "Maxson". I take it this city is named after the various Brotherhood Maxsons - so what's the story? Did they settle down and make a larger town? I can hardly imagine the Brotherhood of Steel doing this, let alone for some city like the NCR.

Secondly, in FO1 Tandi is of East Indian decent but in Fallout 2 she is clearly white. And has a Texan accent. Also, what happened religiously in NCR? I know it was supposed to

be a intentionally mixed Vault ethnically, but they seem to be Hubologists (and there are a lot of crosses around in general).

Well, Aradesh has East Indian influences about him, but I don't know about Tandi's mother, since she kicked the bucket before the game starts. She has darker skin in F1 than F2 most likely because when 2 rolls around, she's ancient and she spends a LOT more time indoors. As for shedding Dharma's teaching, Tandi loved her father, but didn't always agree with him, and I imagine religion was no exception.

The designers for NCR, Zeb Cook and John Deiley, felt that with the huge brahmin trade, NCR would gain some Texan color and slang (I think Zeb just lived in Texas too long that the region was burned into his skull), so Tandi's speech is roughened up as a result of 80+ years of brahmin-driving influences. There you go.

Religiously - while Aradesh believe in the teachings of Dharma, Tandi always believed in the separation of church and state - and resisted any attempts to canonize the Vault Dweller within the city limits (the statue's fine, but that's it). Both Aradesh and Tandi found politics and religion don't mix, especially when they got more exposure to the people of the Hub and visits from a few well-spoken members of the Followers of the Apocalypse.

In any event, the NCR allows any non-psychotic religions within their capitol (they are all for freedom of religion, as long as it doesn't involve human sacrifice or dipping people in Vats) and the crosses were just holdovers from Fallout 1 scenery. It is quite likely that the members of Shady Sands were Catholic, but as a general rule, you have to be careful about bringing real world religions into games from a development standpoint - it's worse than profanity in the "Top Ten List of Things People Will Get Up in Arms About."

That said, the Hubologists have no relation to Scientology. Any coincidences between the two groups are just that, coincidences.

One last thing, from a development/game logic standpoint, the Hubologist was mostly in NCR to allow you to access the Hubologists in San Francisco later on, much like Jain in the Hub in Fallout 1.

Thirdly, is there going to be any reference to what happened elsewhere? Like Canada or China or Europe perhaps? There were a number of dots on the world map in the Enclave war room? Are these other US bases?

Nothing on any other countries that hasn't already been mentioned in the Bible, at least, not for some time.

The dots on the map wall were either Enclave bases, "sites of interest" for the Enclave, special monitoring stations, or just flashing red dots placed there for ambiance. I'm betting on the latter.

Finally, I was doing some research into nuclear winters. South America as a whole doesn't have many natural resources, so would likely not be involved with the Great War (never has been a major player, never will be), and because of it's far-south location, it will be spared from a lot of the nuclear fallout and pretty much all of the effects of the nuclear winter. What is South America's status in the Fallout world?

Well, the author of *The Last Ship* agrees with you; South America probably didn't get involved or hit as bad, but I won't be covering any specifics in the Bible, at least not anytime soon.

Whoever asked about penguins in the last update should probably check out *The Last Ship*, too, since the author dwells on the topic of penguin's survival quite a bit.

Somebody I forgot the name of asked this:

What does the yellow reactor key card do?

Last I heard, it was supposed to either (1) do something to the nuclear bomb in the Enclave, or (2) do something to the reactor in Gecko. Whatever it was, I don't think it made it in – but I need to shanghai a programmer to make sure. They all stopped talking to me since I turned into a raving lunatic during Icewind Dale 2, so it may take a while for me to hunt them down and place them in interrogation cages.

TALKING DEATHCLAWS

BTW, the talking deathclaws *were* destroyed at the end of Fallout 2. Xarn and Goris did not go on to create a new species. They are gone. Kaput. Goodbye. In fact, any mutant animal that talks can safely be assumed to have died at the end at the exact minute that Fallout 2 was over.

Any last words, talking animals?

I *thought* not.

A HISTORY OF DEATHCLAWS

And for you Deathclaw-lovers and all of those who love *Fallout: Tactics*...

Did you know Deathclaws originally had hair?

Do you know what Deathclaws were originally modeled after? And no, I don't mean the "Shadowclaws" in *Wasteland*.

Wait for the next update for the exciting answers and concept art! You'll get to see the dark underbelly of development at its finest!

MORE ON HORRIGAN

Oh, I checked with the designer for Horrigan (Matt Norton, one of the lead designers for F2), and the deal is:

1. He's a new model of super mutant, even bigger, stronger, and faster than other super mutants. He's like New, Improved Kleenex.
2. Not only was he exposed to FEV, but he was also given controlled injections of a modified version of FEV to make him a complete muscle-bound jerkoff.
3. He can't survive outside his armor. The armor continually injects him with drugs and other stabilizing agents. Ha ha ha, Frank.
4. Frank Horrigan is also a reference to Clint Eastwood's character in "In the Line of Fire." Let the pop culture flaming begin.
5. He is the secret service agent that the Chemical Corps officer in the Enclave mentions as having being experimented on.

Here's a summary of NCR and the Brotherhood of Steel for anyone who cares or who doesn't know what the hell "NCR" and "BOS" mean and why they're there; WARNING: This is just a summary for the moment, not the end-all, be-all of the New California Republic. Flag design courtesy of Matt Norton, from Fallout 2.



NEW CALIFORNIA REPUBLIC

NCR Summary: The New California Republic (NCR) is a government on the rise from its modest beginnings in the village of Shady Sands in *Fallout 1*, almost eighty years ago. The NCR capitol (Pop: 3000+) is west of the Rockies, in the middle-eastern portion of California (almost straight east inland from San Francisco). The NCR is arguably the largest power group in the world of *Fallout*, and maintains the largest standing army.

Government: The government of NCR is much like the Pre-War United States, with a House of Congress staffed by elected representatives (Congressmen elected by their states). These representatives decide upon the President and Vice-President to head the council and govern the republic - under advice from the representatives, of course (NCR, at the time, has no existing term limits - Tandi was currently serving her tenth year at the beginning of *Fallout 2*). The titles for these representatives have ranged from "Councilor," "Counselor," "Councilman," "Representative," "Senator," and in particular, the Hub (in its own obstinate way) prefers to call their representatives "Governors." (There is a lot of friction between the Hub and Shady for a variety of reasons, usually related to trade rights and caravan routes.) In any event, all titles are recognized and accepted outside of the council chambers, but within the chambers, the titles are occasionally used as insults and spark furious debates - nothing more than petty displays of each state trying to exert its independence.

NCR has outlawed slavery in their territories, have one of the best and largest standing armies in the wastes, and have benefited under their current President, Tandi, who has been with the Republic since she was a young girl in Shady Sands (see *History*, below). On the plus side, the NCR has outlawed slavery in their territories, has attempted to bring civilization and law back to the wasteland, and they don't (openly) discriminate against ghouls and mutants.

There is little to no sexism in NCR (unlike most other territories in the wastes), most likely due to the community's origins in Vault 15 and because of Tandi's extended presidency. The republic also has shown little discrimination against ghouls and mutants, though many political analysts argue that this is because NCR has had limited contact with them (NCR had little contact with Necropolis or the Master's Army).

The NCR military is composed of several Divisions,¹ including special cavalry and mechanized units. One of their "Special Forces" units consists of the Rangers, a select group that is pledged to protect the people of the Wastes much like the Texas Rangers of old. The Rangers are said to have numerous safehouses throughout the wastes, and they use these to strike at slavers outside of NCR territory (usually in the North). As expected, the two groups hate each other with a passion. NCR was also in the habit of establishing marshals in the major population centers in their territories, responsible for enforcing the laws of NCR throughout the Republic. Ghouls, super mutants, and humans were all known to serve in the NCR armed forces, even in the rangers.

Although nearly hitting a hundred years of age, Tandi has done more to unite the people of the wastes than any other leader born from the ashes of the Great War, and she is revered as a saint and even a "Great Mother" by some of the tribals outside of the Republic territories. Tandi's State of the Republic messages were famous for inspiring countless people to join the "service" and rebuild civilization.² Under her rule, the republic has grown, and she has focused efforts on rebuilding the pre-war infrastructure to support the growing population, finding new forms of transportation and manufacturing, clearing roadways and rail lines, building forts, fostering caravans and trade in the republic (and with other territories), and dealing with threats swiftly and efficiently. In all her years, she has never forgotten her roots in the small village of

¹ These "divisions" are notably smaller than modern-day Divisions by several factors. While NCR can field a large number of troops compared to most other communities in the wasteland, they would be nothing more than a drop in the bucket to Pre-War Divisions.

² "Nothing will ever break up our home," Tandi proclaimed in her second State of the Republic address. "We will create a new future - without the mistakes of the past." Political jargon blah blah blah - but with heart!

Fallout 1, and she has always strived to put the welfare of the common man above the wheels of progress. When people talk about "good people," Tandi's good people.

Common NCR Laws include:

- No weapons may be carried openly within the city limits.
- Public drunkenness and drug use is grounds for arrest.
- Slavery, gambling, and prostitution are not permitted within the city limits.

These laws were more relaxed in the outlying settlements, but became more rigidly enforced the closer one came to a major NCR population center.

History: The New California Republic was born out of the remnants of the survivors of Vault 15, a sister vault to Vault 13 that opened earlier and released its occupants out onto the wasteland. Abandoning their vault (after scavenging most of what they could from the surviving technology and collapsed lower levels), the former residents of Vault 15 founded the small walled community of Shady Sands, a town midway between Vault 13 and 15. In the period of *Fallout 1*, this community was led by Aradesh, and his daughter, Tandi, eventually rose to become president of the sprawling New California Republic in *Fallout 2*. (Without the efforts of the Vault Dweller in F1, however, the raiders in the region - the Khans - would have claimed Shady Sands and stamped out the republic before it even got started). At the time of *Fallout 2*, NCR's main resource is its great brahmin herds, which provides most of the wasteland with as much meat and leather as they require. The brahmin barons and ranchers in NCR (along with the Stockmen's Association) hold a great deal of sway with the caravans and the government.

The NCR's relationship with their old Vault has undergone some violent upheavals over the years. From nests of monsters, raiders, Vault 15 worshippers, ghouls scavengers, to more innocent (and not-so-innocent) Squatters and Salvage Teams and the Republic arguing over excavation rights, it seems to be difficult for the government or any other inhabitant of the wasteland to leave the area alone... because, well, it's a Vault.

The brahmin herders' hatred of radscorpions is famous, and it dates all the way back to the founding of Shady Sands. Rumors of herds being attacked by talking deathclaws are unfounded.

The Hard Sell: NCR has a decent marketing and public relations department, and they are constantly sending couriers out into the wastes to nail up NCR posters or disseminate NCR propaganda. Here's a transcript of the NCR sell sheet in *Fallout 2*:

NEW CALIFORNIA REPUBLIC

We're Here! Why not join us?

There's a wonderful future ahead - and it could be yours with the New California Republic!

But what is it, you want to know?

HOW BIG IS NCR?

Founded eighty years ago, the NCR is now comprised of the states of Shady, Los Angeles, Maxson, Hub, and Dayglow. Approximately 700,000 citizens are pleased to call NCR home.³

WHAT DOES NCR STAND FOR?

The New California Republic is dedicated to bringing peace, security and justice to the people of the great west. NCR's fine police forces constantly patrol and arrest any raiders, cannibals, slavery ("slavers" - ed), and lawless mutants within the country, and the NCR army valiantly

³ These population figures are exaggerated, though the population of NCR and all its states is pretty impressive. It has been known to vary according to plot purposes.

protects the borders against outside marauders. To ensure justice and liberty, all citizens have access to NCR's courts and the right to vote for a representative of their choice to sit in the Hall of Congress. In the words of President Tandil, "A safe people is a strong people."

WHO'S IN CHARGE HERE?

NCR may be a bit different from what you're used to. There are no chieftains, town bosses, kings, or dictators here. Our leaders are elected by the people! That's right -- every state has the right to send representatives to the Hall of Congress. These representatives select the President and Vice-President to head the council and it is their advice which guides the President's decisions. For ten terms now, President Tandil has been the unanimous choice of the council, who respect her wisdom and foresight.

SOUNDS GREAT! HOW DO I JOIN THE NCR?

All law-abiding and peaceful people, human or mutant, are eligible to become citizens of NCR. To become a citizen all you have to do is move to NCR and present your claim for immigration. After citizenship training and processing your application, you will be notified of your new status as a PC (Provisional Citizen). From there, it's only a short step to full citizenship!

Of course, NCR is not for everybody - slavers, unreformed mutants, known raiders, and other undesirables need not apply!

BUT I WHAT IF MY ENTIRE TOWN WANTS TO JOIN?

Depending on where your town is located, NCR does accept petitions by villages, towns, bases, city-states, even minor kingdoms for annexation by NCR. Once the petition is accepted, NCR will grant your town territorial status. Once the needed police and army presence is established and any banditry or other lawlessness has been dealt with, your village can apply for full statehood in the NCR. It's that simple!

So remember - WE'RE HERE. WHY NOT JOIN US?

Prepared by the New California Relations Advisory Panel

NCRAP Pub. #A7-7893b

NCR Regulations: Oh, and to recap, here's a listing of NCR laws from Fallout 2:

Welcome to the New California Republic! Before entering our fair city please take a moment to familiarize yourself with the following rules and regulations.

No weapons may be openly carried inside the city limits.

Persons found under the influence of alcohol or drugs will be arrested.

Slavery, gambling, and prostitution are not permitted within city limits.

Ignorance of the law is no excuse. A dumbass will get his/her butt kicked just as fast as a smartass.

If you can't live by these laws - then get the hell out cause we don't want you here!

More on NCR to come - the above is just an introduction. Just like the following is for the Brotherhood of Steel (and again, this is not the end-all, be-all, it's just laying a foundation):



THE BROTHERHOOD OF STEEL

The Brotherhood of Steel: The Brotherhood of Steel (BOS) is a techno-religious organization, with roots in the US military and government-sponsored scientific community from before the war. The BOS is mostly composed of the descendents of those military officers, soldiers, and scientists, but aside from some outlanders among their ranks, the BOS is as close to pure strain humanity (prime normals) as you're going to find outside of a Vault.

The ranks of the BOS is generally recognized as being composed of the best and the brightest... which means the BOS is a really small organization, at least compared to NCR. They

make up for this with their frightening arsenal of pre-war and post-war technology: They have laser weapons, power armor, surgical enhancements, combat implants, and a squad of Brotherhood Knights have the ability to erase an entire town from a map without a scratch.

The Brotherhood are generally good guys, but they have their faults - (1) they don't care for mutants, (2) they worship technology, and in many cases, put it above human life, and (3) they don't like to share their choicest technological bits, despite the obvious benefits their technology could bring to the wasteland. It's commonly accepted within the Brotherhood that the people of the wasteland are not responsible enough to use (and maintain) all of the technology the BOS has at their disposal. They are known trade some of their technologies with frontier communities and NCR states, but they keep the more sensitive technologies to themselves.

It is believed that the current HQ of the BOS is the Lost Hills bunker in Fallout 1, but at the time of Fallout 2, the BOS is spread across the wastes in small bunkers and installations hidden from the eyes of common folk – finding them all and wiping them out would be a difficult and dangerous task.

The BOS is divided into different ranks: *Initiates* are trainees who are expected to perform well enough in the training process to be promoted to *Squires*. After proving themselves, Squires are promoted to *Knights*. After many years of service and experience, the best *Knights* are promoted to *Paladins* - the pinnacle of the Brotherhood military. Paladins who survive to their later years become *Elders*, and they number among the Brotherhood ruling council.

It is also possible to serve the Brotherhood as a *Scribe*. Scribes are responsible for copying the ancient technologies, maintaining the current technology and even experimenting with new weapons and other useful devices. Scribes rarely leave the safety of the BOS bunkers, but they are sometimes called into the field to examine a piece of technology or perform a task beyond the skills of the Brotherhood soldiers.

It is said that the BOS symbol, broken down, represents each of these orders. The sword represents the Paladins, the wings represent the Elders (the “wings” control the movement of the sword), the large gear represents the Knights, and the two smaller gears represent the Scribes and the Squires, whose services keep the Knights supplied with the information and the manpower to get their jobs done. No one is sure what the circle means, however.

Squires may be only in *Fallout: Tactics* (I don't recall "Squires" in Fallout 1, but my memory is hazy), and if so, replace the "Squires" with "Initiates" in the symbolic breakdowns.

More on BOS to come – the above is just an introduction.

Here's that segment on the EPA that I mentioned before:

E.P.A. AREA SUMMARY

"We asked for the future. And we got it."

SUMMARY

The **Environmental Protection Agency** is a bonus location for Fallout 2. It's full of an odd assortment of puzzles, fighting, and various weird adventure "seeds" (literally), including, but not limited to:

- 1A. A parking lot jungle replete with several varieties of spore plants.
- 2A. A bizarre petting zoo. Filled with humans. Hungry humans.
- 3A. Sub-levels filled with exciting varieties of poisonous gases and virus-laden mutant fruit flies.
- 4A. A small government museum complete with dioramas! The exhibits on post-holocaust America are especially amusing.
- 5A. A storage room full of new seeds for Arroyo. Some seeds grow into bad things.
- 6A. An entourage of custodial peevish holograms that provide tours and bursts of incidental binary strangeness.
- 7A. Various NPCs on "ice" (in hibernation).
- 8A. Computers filled with information on crop rotation and the F.E.V. virus.
- 9A. A clinically depressed Mr. Handee and a hyperactive drug-making appliance for Science characters.

The EPA was supposed to use the Vault City/Vault 13 tile set for interiors (bright white, like original vault). Special scenery objects include an EPA parking lot sign, and color-coded symbols on the walls, running the whole range of the rainbow.

SPECIAL ITEMS

Can of Dog Food (*a la* Mad Max)
Insecticide
Shampoo
Pesticide
Marijuana
Pop-Rocks (if you drink water with them, you will explode in a horrible death animation)
EPA Government Power Cell
Bug Spray Canister (kills all insects instantly)
Plant Spray Canister (kills all spore plants instantly)
Gas Mask
Solar Scorcher (this was its original location)
Test Tube

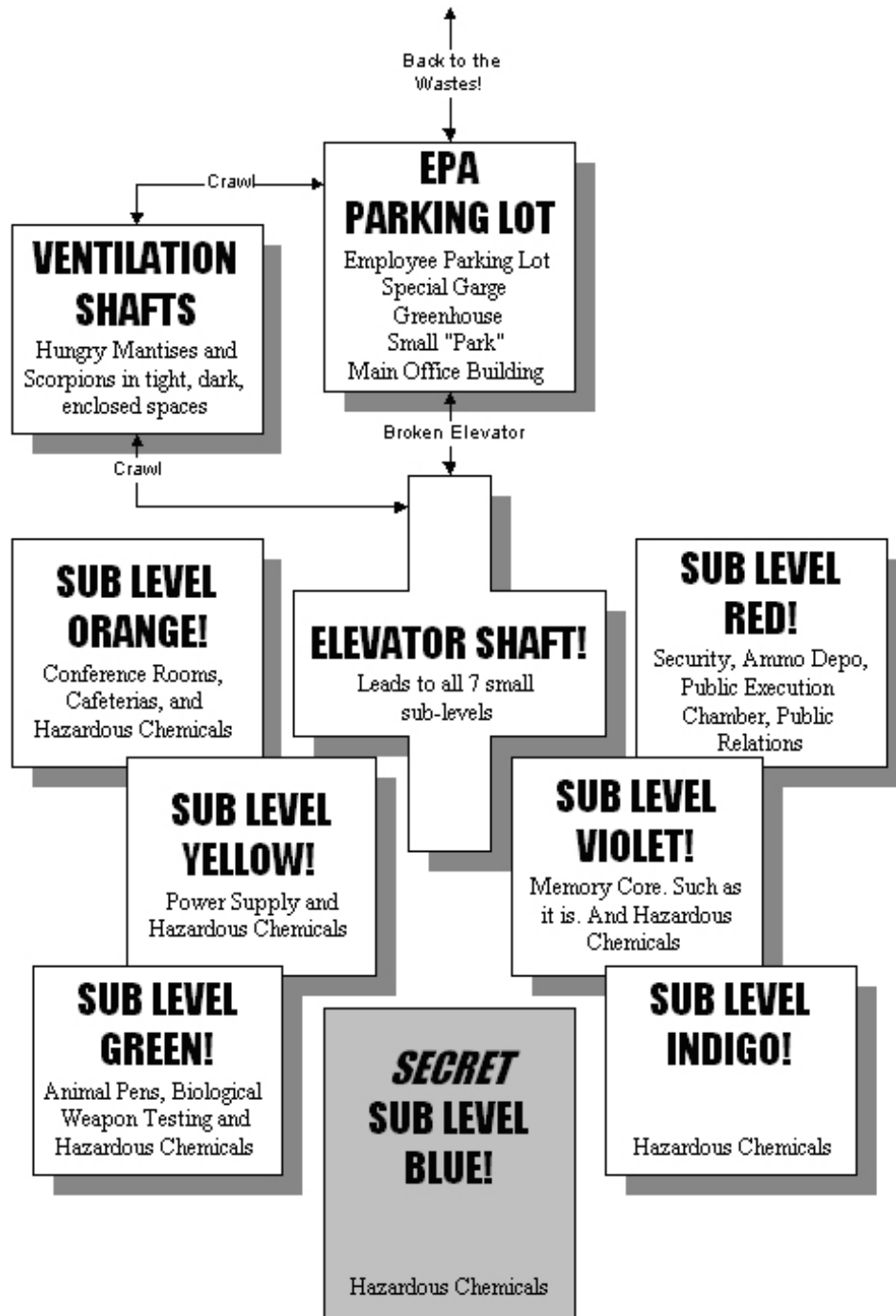
ART

The **EPA** is 4 maps large. These maps are small, and these “levels” often share the same map.

Parking Lot	
Entrance Level	(Office Building)
Level Red	(Security, Public Relations, Museum)
Level Orange	(Blood-Curdling Cafeterias and Sinister Conference Rooms)
Level Yellow	(Power Core)
Level Green	(Animal and Biological Testing; Arboretums and Cages of Creatures)
Level Blue	(Hibernation)
Level Indigo	(Top Secret Research into Gender Modification)
Level Violet	(Memory Core)

The breakdowns of map flow is listed below:

EPA MAP!



MAJOR ADVENTURE SEEDS

Carnivorous Jungle: The player has to navigate a jungle filled with Venus Mantraps. This isn't as much an adventure seed as a combat-based necessity in order to enter the EPA in the first place.

Hologram War: The player can encounter some of the custodial holograms that still fill the EPA corridors. They were mostly used as tour guides while the EPA was still in operation, but ever since the "Big Silence/Great Static" following the "Big Flash," they have become somewhat warped in their duties. They have taken the bureaucratic mentality to a lethal extreme, imposing regulation and regulation upon each other until they have become gridlocked in their duties and can no longer function. The heads of each division are currently arguing *ad nauseum* in one of the EPA conference rooms because the presence of a powerful magnetic field that keeps erasing their short-term memories (they keep repeating the same argument every five minutes, forget everything they say, then repeat it again). Only by fixing the problem with the magnetic coils, interrupting the conversation and ordering them to stop can the player stop the gridlock.

Holograms can only be destroyed by an EMP grenade, or by stealing or destroying the EPA power core in Sub-Level Yellow.

Gas-Filled Level: One of the levels is filled with poisonous gas. If the player wanders around this level, he will take considerable damage every round until he leaves or dies. A player can either make brief "hops" onto the level to steal things from the labs there or else find an oxygen mask hidden on one of the lower levels that allows him to breathe freely as long as he has it in one of his two hands.

Ventilation Horror: In order to get access to the main EPA complex, the player has to navigate a series of ventilation shafts where he can only use small weapons against the inhabitants of the ventilation shaft: Giant Mantises, Small Scorpions, and the occasional man-eating plant.

OTHER SEEDS

Static "Zzzzzt": The player discovers one malfunctioning hologram that speaks only in static (like a fast food drive through speaker). If the player repairs the holograms projector (or slows down his speech), he can learn some important codes or other information.

Mr. Chemmie! The player discovers a small appliance in one lab (*Mr. Chemmie*) that takes various raw materials (plants, beer, condoms, chemicals, garbage, Scorpion tails) and turns them into various pharmaceuticals like RadX, Mentats, RadAway, and so on. The player can experiment with the machine to create certain drugs or bizarre substances. Characters with a high Intelligence, Luck, or a high Doctor or Science skill can create special drugs that no other character can.

Mr. Chemmie always "speaks" in exclamation marks.

The Brave Little Toaster: In one of the abandoned kitchens in the EPA is a small, intelligent toaster with an IQ of 6000. All of its brain power is focused towards convincing humans to make toast.⁴ Dialogues with it will be somewhat one-sided, as the player will ask it a question, and it will respond with some question about whether the player will like toast or waffles.

While the toaster seems like just an incidental piece of strangeness, the toaster does happen to mention in its dialogue (almost in passing) that it is broken and can't access everything it needs to in order to successfully make toast. If the player repairs it, then the toaster can provide him with the following: the

⁴ Yes, I know it's a pop culture reference. Surprised? Sue me.

secret code for the vault in one of the New Reno casinos (which is otherwise near-unopenable), some secret codes for jinxing the slot machines out of their cash, and some other bonus items.

ABACAB: One of the computers in the EPA mentions a simple cure for epilepsy. Apparently, by repeating a series of letters with the proper inflections, a listener can be cured of either autism or epilepsy. If the player discovers this and goes to New Reno and says the code phrase to the Barking Man (who didn't make it into the game, so I put him in *Planescape: Torment*), then he will be cured and gives the player a minor reward (in addition to the minor experience award).

No News of a Thaw: The player may discover some hibernation cells in the lower levels of the EPA, and depending on what “type” of character he is (combat, stealth, or diplomatic), he can free one of three hibernating humans that have been preserved since the great silence.

PRIMARY CHARACTERS

Hologram 00000, Director of Science: A brilliant hologram that can't express himself properly... an electrical short has damaged his vocal abilities, and now he can only communicate through displaying binary numbers (a character with a high Science or Intelligence can ‘read’ the binary codes, decipher what he is saying and fix him).

Hologram 10001, Director of Security: A gung-ho marine hologram who peppers his speech with a lot of crude German phrases. He believes that everything in the complex should be killed and then the EPA allowed to “reboot.” Fortunately, he can no longer command any of the robots, all the weapon defenses have run out of ammo, and all he can really do is bluster about how much he would like to destroy everything if he was in charge. If the player performs some tasks for this Director, they can get access to the Security Locker Rooms, which holds some old ammo, weapons, and some armor.

Hologram 12001, Director of Operations: A weasely, nervous-smiled male hologram. Only characters with a high Intelligence can make out what the hell he is saying since he uses so much doubletalk. Nothing can be gotten out of this director, since he has no authority over anything.

Hologram 10031, Director of Ground Maintenance: A frustrated hologram who is in charge of all the ground maintenance at the EPA. The fact he has no physical body and none of the robots do anything he says has forced him to operate at 100% inefficiency for the past few decades. The other directors always bring this up whenever they can. If the player fixes the robots or takes care of some of the gardening and landscaping problems around the EPA (killing the lethal plants), the Director will “hire” them, allowing them access to the EPA medical cabinet and storage shed (which contains new seeds, chemicals, herbs, and various insecticides and weed killers).

Hologram 40011, Director of Public Relations: This sexy-sounding (yet somehow prim and proper at the same time) hologram is in charge of all the tours and press releases. Her syrupy-sweet attitude and her constant stream of press releases gets annoying really fast. Nonetheless, the player cannot get to certain areas of the EPA complex without her... there are some portions of the complex that will only open if she leads the way (mostly the museums and petting zoo). Characters with a high diplomatic skill can get much more out of her than other characters.

SECONDARY CHARACTERS

There are no secondary characters. It's all or nothing in the cutthroat world of the EPA.

TERTIARY CHARACTERS

Zzzzzt: A malfunctioning hologram that speaks only in static until he is repaired. When repaired, he is quite relieved and can provide the player with information on various mysterious objects in the EPA sub-levels, along with codes that allow access to restricted areas.

Brave Little Toaster: A genius-level toaster. It has a 6000 IQ. It likes to make toast.

Mr. Chemmie: A cheerful little drug-making appliance.

LIFE WITH THE GECK

What's in a Garden of Eden Creation Kit? Well, here are my thoughts. Feel free to feed the flames.

The following is inspired by a thread on the BIS forum started by **Crazy Tuvok/Christopher Gannon**. He asked some questions about the GECK, and here are my answers:

I'll start by saying that the GECK is a plot device. A McGuffin. It had the ability to save Arroyo when in the hands of the Chosen One or a learned member of the wastes.

As a crude plot device, it may also be used as seen fit to create plots and plant new and exciting adventure seeds as needed. As a result, all of the material in this section is subject to change based on the whims of whoever wants to play with the GECK. If you want it to be a magic box of 1950s science, that's cool - we might do it, too. However, my current take on it is, it's not some miracle device, it's a little more down to earth - more like a deconstruction kit, if you will.

The GECK isn't really a replicator. It contains a fertilizer system, with a variety of food seeds, soil supplements, and chemicals that could fertilize arid wasteland (and possibly selected sections of the moon's surface pre-conditioned to accept the GECK) into supporting farming. The GECK is intended to be "disassembled" over the course of its use to help build communities (for example, the cold fusion power source is intended to be used for main city power production), and so on. Anything else people needed, they could simply consult the How To Books/Library of Congress/Encyclopedias in the GECK holodisk library for more knowledge. The pen flashlight was just a bonus.

The GECK also contained some basic force field schematics as well as info on how to make adobe-type buildings from the landscape (or contain chemicals that can create "sand-crete" walls).

As for clothing, the GECK contained codes that allowed the Vault to create more varieties of jumpsuits (and weatherproof gear) from their dispensers, which they could do anyway before the GECK. It's possible the GECK contained other codes that could unlock more functionality within the Vault computers that weren't initially available because they would jeopardize the survival of the Vault if they were used or scavenged (or else they would interfere with the Grand Experiment).

Also, the GECKs also tell the Vault inhabitants how to disassemble sections of their Vault (or take extraneous systems from the Vault) to create new homes and defensive structures on the surface.

The "just add water" comment/joke for the GECK in the description in *Fallout 2* refers to the fact that part of the GECK's operations require that the Vault Dwellers use water from their water purification system in the Vault to help with the agriculture, irrigation, and possibly the cold fusion as well. It wasn't meant literally. If you want it to be, that's cool, too. Go for it.

To close, the "basic replicator" mentioned in the *Fallout 1* manual is nothing more than a selection of seeds and fertilizers. The fact that it can "build basic items" is intended to mean that you can use it to help break down sections of the Vault into items usable in a community, as well as provide new codes for the machines in the Vault to create new items from the dispensers and computers.

Tuvok's replies are:

1a. Wouldn't this [the seeds and soil supplements] date itself rather quickly?

Sure, but the government subcommittees sponsoring the research and the GECK contractors (Future-Tec) weren't *really* concerned about that. They were "relatively certain" the seeds would be viable in a post-nuclear environment. They had done "thorough tests," and "all conclusions point to this as being the best option." The GECKs are a miracle... a miracle that they work.

1b. What may be suitable for planting in the present may not be suitable in 20 yrs. This is esp true I would think in the FO universe with its rather unstable ecosystem. I mean if one really wanted to be certain that what one was planting would grow the best thing to do would be to collect the seeds, spores etc from already growing food sources - these have a guaranteed fertilization rate. After all those corn seeds that were put in the GECK 50 yrs ago now have not sufficiently mutated to endure the new Wasteland (even in a "normal" ecosystem, the only strains of plant that survive are those that mutate).

You're absolutely right. The GECK builders had no idea what the post-nuclear world would be like, and they had no real way to anticipate it, despite their "thorough tests" (it's doubtful they gave it much thought, to be honest, considering how badly organized the Safehouse project alone was, not to mention the experimental nature of the Vaults) - still, it seems as if the seeds present in the GECK were viable for Vault 8.

Evolutionarily speaking using old seeds would be like reintroducing a species that may have gone extinct or at the very least one that is not as cutting edge in its evolution.

You bet. And that's dangerous on so many levels! Wheee!

Also, as far as How-to books, schematics, sandcrete etc.. this seems a bit user heavy. That is a GECK is going to be utterly useless to those who cannot read, or don't have the raw materials to construct a force field, sandcrete polymers etc.

The GECK designers assumed that the Vault Dwellers would know how to read and how to operate various technologies present in the Vault - they didn't plan for tribals or other contingencies. They also didn't plan on the FEV getting released, or the fact the Vault Dwellers might be attacked by giant mutated scorpions or rats, either. On one hand, you could say they weren't too bright, and on the other hand, you could say they weren't prepared for the future of the human race to become an extended Post-Atomic Horror movie. Silly rabbits!

My impression of the GECK was that it really was a Garden of Eden. Given that most of the tribals in FO seem preliterate (yes I know I am avoiding overly PC flaming), and in pretty dire shape resource wise (unless the polymer construction requires Broc Plant and Xander Root) this seems to make the GECK kinda useless to them (nice suitcase tho =) I understand that originally the GECK was designed for Vault inhabitants and they therefore would be able to (presumably) procure these basics -so my question then is were the Arroyo Tribals merely "invoking" the GECK - that is, did it represent to them life in the Wastes without them knowing precisely what it was . This seems consistent with the Elder's original quest which speaks of the GECK in high mythic terms.

The tribals were invoking the GECK as a panacea for all their problems. They saw it as a miracle device, and while the item *is* useful, it's not the miracle maker they considered it to be.

Other follow-questions relating to this on the boards include:

Section Eight/Gareth Davies:⁵ I think there *has to be* more to the GECK than some basic agricultural supplies. If not, then Fallout 2 is a fool's errand.

In some ways, it's just intended as irony. The GECK just isn't the holy cure-all miracle device the inhabitants of Arroyo intend it to be, but in the right hands, it's a very useful piece of Pre-War tech that can help establish a viable community.

Section Eight/Gareth Davies: A high int character in Fallout can explain to Shady Sands about crop rotation, etc. So why couldn't a high int char in Arroyo do the same? Bam. Game finished. 2 seconds elapsed. Fun.

Well, just knowing about crop rotation isn't enough if the crops are dying or if the land can't support crops, etc. While sections near Arroyo could support vegetation, the agriculture in the community was suffering - new seeds and fertilizers would help with that.

Nope, it basically has seed samples, fertilizers, and other supplements, and a nifty power source - just knowing about crop rotation isn't enough. In the right hands (and in the hands of the Chosen One), its useful functions can be exploited, however, and be used as a foundation on which to build a stable city. All the crops in Arroyo were dying out, and the GECKs fertilization and new seed samples provide the basis of a new, healthy crop.

APPENDIX 1.0

Here's a list of Tell Me Abouts that are easy on the eyes, courtesy of **Sebastien Caisse**, the BIG WINNER. I have not tested all of these, but they probably all work - and it's a good place to start if any of you feel like quizzing the inhabitants of Fallout 1 about certain key words. (Thanks again to **Michael Jeppesen** who also provided a list of keywords.)

ARADESH Aradesh	BUTCH Maltese
ARADESH Dharma	BUTCH Thieves
ARADESH Tandi	BUTCH Justin
ARADESH Razlo	BUTCH Harold
ARADESH Raiders	BUTCH Merchants
ARADESH Vipers	BUTCH Daren
ARADESH Khans	BUTCH Crimson
ARADESH Scorpions	BUTCH Demetre
ARADESH Claw	BUTCH Trader
ARADESH Junktown	BUTCH Butch
ARADESH Spear	BUTCH Beth
ARADESH Station	BUTCH Rutger
ARADESH Lair	BUTCH Water
ARADESH Scorpion	BUTCH Missing
ARADESH Tower	BUTCH Market
ARADESH Seth	BUTCH Claw
BARRY Chip	BUTCH Glow
BARRY Necropolis	BUTCH Town
BARRY Set	BUTCH Heights
BARRY Watershed	BUTCH Junktown
BARRY Hall	BUTCH Killian
BARRY Lou	BUTCH Brotherhood
BARRY Ghouls	BUTCH Elder
BARRY Normals	BUTCH Angel's
BUTCH Decker	BUTCH Adytum
BUTCH Underground	BUTCH Jon

⁵ Of Microforte fame, for *Fallout: Tactics* fans... and Australian fans.

BUTCH Cathedral
BUTCH Morpheus
BUTCH Jain
BUTCH Master
BUTCH Weapon
BUTCH Bob's
BUTCH All-In-One
BUTCH Followers
BUTCH Harris
BUTCH Falcon
BUTCH Nightclub
BUTCH Merchant
BUTCH Hightower
BUTCH Greene
BUTCH Caravan
BUTCH Romara
BUTCH Traders
BUTCH Tower
BUTCH Caravans
BUTCH Darkwater
BUTCH Steel
BUTCH Angels
BUTCH Boneyard
BUTCH Zimmerman
BUTCH Weapons
BUTCH Store
BUTCH guns
BUTCH Bobs
BUTCH Iguana
BUTCH Apocalypse
BUTCH Death
BUTCH Deathclaw
BUTCH Hot
BUTCH Oldtown
BUTCH Old
BUTCH Maxson
BUTCH All
BUTCH Junk
CABBOT Initiate
CABBOT Vree
CABBOT Rhombus
CABBOT Elder
CABBOT Elders
CABBOT Scribes
CABBOT Knights
CABBOT Hub
CABBOT Disks
CABBOT Merchants
CABBOT Brotherhood
CABBOT Ancient
CABBOT Exodus
CABBOT Cabbot
CABBOT Order
CABBOT Paladins
CABBOT Master
CABBOT War
CABBOT Army

CABBOT Caravans
CABBOT Cathedral
CABBOT Chip
CHILD Deathclaw
CHILD Raiders
CHILD Junktown
CHILD Brahmin
CHILD Chip
CHILD Merchants
CHILD Khans
CHILD Garl
CHILD Shady Sands
CHILD Hub
CHILD Tandi
CHILD Aradesh
CHILD Seth
CHILD Razlo
CHILD Police
CHILD Caravans
CHILD Traders
CHILD Children
CHILD Necropolis
CHILD Spot
CHILD Brotherhood
CHILD Boneyard
CHILD Towers
CHILD Town
CHILD Downtown
CHILD Heights
CHILDMEM Cathedral
CHILDMEM Mutants
CHILDMEM Master
CHILDMEM Boneyard
CHILDMEM Followers
CHILDMEM Chip
CHILDMEM Apocalypse
CHILDMEM Necropolis
CHILDMEM Set
CHILDMEM Watershed
CHILDMEM Hall
DECKER Decker
DECKER Underground
DECKER Maltese
DECKER Thieves
DECKER Justin
DECKER Harold
DECKER Merchants
DECKER Daren
DECKER Crimson
DECKER Demetre
DECKER Far
DECKER Butch
DECKER Beth
DECKER Missing
DECKER Market
DECKER Claw
DECKER Town

DECKER Heights	HAROLD Grey
DECKER Cathedral	HARRY Master
DECKER Morpheus	HARRY Lou
DECKER Jain	HARRY Set
DECKER Master	HARRY Shed
DECKER Store	HARRY Ghouls
DECKER All-In-One	HARRY Norms
DECKER Falcon	HARRY Necropolis
DECKER Nightclub	HARRY Unity
DECKER Greene	HARRY Cathedral
DECKER Hightower	HARRY Chip
DECKER Caravans	HARRY Hall
DECKER Romara	HARRY Water
DECKER Go	HARRY Human
DECKER Trader	HARRY Normies
DECKER Harris	HARRY Normals
DECKER Death	HARRY Children
DECKER Deathclaw	HARRY Children of the Cathedral
DECKER Old	HARRY Water Shed
DECKER Oldtown	HARRY Lieutenant
DECKER Children	HARRY Lutenant
DECKER All	HARRY Loo
GARL Khans	HARRY Lou Tenant
GARL Garl	HARRY Larry
GARL Junktown	HARRY Barry
GARL Shady	HARRY Gary
GARL Hub	HARRY Terry
GARL Water	HARRY Sally
GARL Tandi	HUNTER Adytum
GARL Sands	HUNTER Followers
GARL Chip	HUNTER Cathedral
GARL That's us, you lackey.	HUNTER Rippers
GARY Water	HUNTER Blades
GARY Necropolis	HUNTER Gun
GARY Set	HUNTER Hub
GARY Watershed	HUNTER Junktown
GARY Hall	HUNTER Water
GARY Lou	HUNTER Nicole
GARY Ghouls	HUNTER Boneyard
GARY Normals	HUNTER Runners
GARY chip	HUNTER Chip
GIZMO Killian	IAN Water
GIZMO Gizmo	IAN War
GIZMO Darkwaters	IAN Shady
GIZMO Gizmo's	IAN Junktown
GIZMO Darkwater	IAN Hub
GIZMO Gizmos	IAN Raiders
GIZMO Casino	IAN Caravans
GIZMO Junktown	IAN Chip
HAROLD Richard	IAN Sands
HAROLD Master	IAN Followers
HAROLD Ghouls	IAN Cathedral
HAROLD Loxley	IAN Garl
HAROLD Cathedral	IAN Master
HAROLD Vault	IAN Unity
HAROLD War	IAN Set
HAROLD Decker	IAN Watershed

IAN Necropolis
IAN Hall
IAN Library
IAN Overseer
IAN Medic
IAN Healing
IAN Vault
IAN Vault-13
IAN Vault13
IAN Killian
IAN Gizmo
IAN Boneyard
IAN Casino
IAN Store
IAN Deathclaw
IAN Exodus
IAN Initiates
IAN Paladins
IAN Scribes
IAN Children
IAN Brotherhood
IAN Vats
IAN Military
IAN Base
IAN Apocalypse
IAN Mutants
IAN Morpheus
IAN Khans
IAN Tandi
IAN Alya
IAN Diana
IAN Gwen
IAN Petrox
IAN Tolya
IAN Booze
IAN Drugs
IAN Seth
IAN Aradesh
IAN Razlo
IAN Zimmerman
IAN Regulators
IAN Scavs
IAN Blades
IAN Nicole
IAN Lieutenant
IAN Psychics
IAN Experiments
IAN Police
IAN Merchants
JAIN War
JAIN Master
JAIN Cathedral
JAIN Mutants
JAIN Hub
JAIN Steel
JAIN Vats
JAIN Holy

JAIN Unity
JAIN Brotherhood
JAIN Flame
JAIN Children
KATJA Water
KATJA Boneyard
KATJA War
KATJA Adytum
KATJA Followers
KATJA Cathedral
KATJA Chip
KATJA Garl
KATJA Master
KATJA Unity
KATJA Set
KATJA Watershed
KATJA Necropolis
KATJA Hall
KATJA Library
KATJA Overseer
KATJA Medic
KATJA Healing
KATJA Vault
KATJA Vault-13
KATJA Vault13
KATJA Killian
KATJA Gizmo
KATJA Junktown
KATJA Shady
KATJA Sands
KATJA Hub
KATJA Casino
KATJA Store
KATJA Deathclaw
KATJA Exodus
KATJA Initiates
KATJA Paladins
KATJA Scribes
KATJA Children
KATJA Brotherhood
KATJA Vats
KATJA Military
KATJA Base
KATJA Apocalypse
KATJA Mutants
KATJA Morpheus
KATJA Khans
KATJA Tandi
KATJA Alya
KATJA Diana
KATJA Gwen
KATJA Petrox
KATJA Tolya
KATJA Booze
KATJA Drugs
KATJA Seth
KATJA Aradesh

KATJA Razlo
KATJA Zimmerman
KATJA Regulators
KATJA Scavs
KATJA Blades
KATJA Nicole
KATJA Lieutenant
KATJA Psychics
KATJA Experiments
KATJA Police
KATJA Merchants
KILLIAN Gizmo
KILLIAN Killian
KILLIAN Lars
KILLIAN Vinnie
KILLIAN Doc
KILLIAN Skulz
KILLIAN Khans
KILLIAN Vipers
KILLIAN Darkwater's
KILLIAN Crash
KILLIAN Gizmo's
KILLIAN Skum
KILLIAN Cathedral
KILLIAN Claw
KILLIAN Hub
KILLIAN Shady
KILLIAN Necropolis
KILLIAN Raiders
KILLIAN War
KILLIAN Strange
KILLIAN Darkwater
KILLIAN Morbid
KILLIAN Darkwaters
KILLIAN Gizmos
KILLIAN Pitt
KILLIAN Sands
KILLIAN Pit
LARRY Water
LARRY Necropolis
LARRY Set
LARRY Watershed
LARRY Hall
LARRY Lou
LARRY Ghouls
LARRY Normals
LARS Gizmo
LAURA Followers
LAURA Nicole
LAURA Cathedral
LAURA Morpheus
LAURA Master
LAURA Nightkin
LAURA Dark
LAURA Auditorium
LAURA Sanctum
LAURA Servitors

LAURA Order
LAURA Apocalypse
LAURA God
LAURA Mutants
LEADER Set
LEADER Master
LEADER Water
LEADER Watershed
LEADER Hall
LEADER Necropolis
LEADER Chip
LORENZO.MSG:{11000
LOXLEY Decker
LOXLEY Jacob
LOXLEY Police
LOXLEY Harold
LOXLEY Kane
LOXLEY Crimson
LOXLEY Traders
LOXLEY Caravans
LOXLEY Market
LOXLEY Claw
LOXLEY Missing
LOXLEY Hot
LOXLEY Town
LOXLEY Heights
LOXLEY Bob's
LOXLEY Cathedral
LOXLEY Brotherhood
LOXLEY Angel's
LOXLEY Blades
LOXLEY Razor
LOXLEY Merchants
LOXLEY Spot
LOXLEY Iguana
LOXLEY Bits
LOXLEY Bobs
LOXLEY Steel
LOXLEY Angels
LOXLEY Boneyard
LOXLEY Caravan
LOXLEY Death
LOXLEY Deathclaw
LOXLEY Glow
LOXLEY Oldtown
LOXLEY Old
LT Unity
LT FEV
LT Master
LT Cathedral
LT Vats
LT Normals
LT Vaults
LT Morpheus
LT Virus
MASTER Unity
MASTER Master

MAXSON Brotherhood
 MAXSON Mathia
 MAXSON Cabbot
 MAXSON Vree
 MAXSON Library
 MAXSON Rhombus
 MAXSON Elder
 MAXSON Elders
 MAXSON Initiates
 MAXSON Scribes
 MAXSON Knights
 MAXSON Paladins
 MAXSON Hub
 MAXSON Butch
 MAXSON Traders
 MAXSON Merchants
 MAXSON Disks
 MAXSON Player
 MAXSON Roger
 MAXSON Exodus
 MAXSON Army
 MAXSON Cathedral
 MAXSON Angel's
 MAXSON Gangs
 MAXSON Adytum
 MAXSON Claw
 MAXSON Harris
 MAXSON Maxson
 MAXSON Angels
 MAXSON Boneyard
 MAXSON Master
 MAXSON War
 MAXSON Caravans
 MAXSON Chip
 MEDIC Medic
 MEDIC Healing
 MISSBRO Brotherhood
 MISSBRO Steel
 MISSBRO Talus
 MORPH Nightkin
 MORPH Master
 MORPH Auditorium
 MORPH Sanctum
 MORPH Morpheus
 MORPH Order
 MORPH Caravans
 MORPH Hospitals
 MORPH Unity
 MORPH Lasher
 MORPH Followers
 MORPH Nicole
 MORPH Adytum
 MORPH Apocalypse
 MORPH Mutants
 MORPH Holy Flame
 MORPH Children
 MORPH Base

MORPH Chip
 NICOLE Morpheus
 NICOLE Nicole
 NICOLE Laura
 NICOLE Jake
 NICOLE Library
 NICOLE God
 NICOLE Master
 NICOLE Nightkin
 NICOLE Cathedral
 NICOLE Adytum
 NICOLE Angel's
 NICOLE Followers
 NICOLE War
 NICOLE Hub
 NICOLE Brotherhood
 NICOLE Angels
 NICOLE Boneyard
 NICOLE Steel
 OFFICER Overseer
 OVER Water
 OVER Vault
 OVER War
 OVER Outside
 OVER Chip
 OVER Library
 OVER Healing
 OVER Medic
 OVER Vault13
 OVER Vault-13
 OVER Overseer
 OVER Waterchip
 RAZLO Khans
 RAZLO Garl
 RAZLO Junktown
 RAZLO Shady
 RAZLO Hub
 RAZLO Water
 RAZLO Tandi
 RAZLO Aradesh
 RAZLO Seth
 RAZLO Razlo
 RAZLO Sands
 REBEL Overseer
 REBEL Vault13
 REBEL Vault-13
 REBEL Vault
 REGULATR Adytum
 REGULATR Followers
 REGULATR Cathedral
 REGULATR Blades
 REGULATR Runners
 REGULATR Hub
 REGULATR Junktown
 REGULATR Chip
 REGULATR Store
 REGULATR Zimmerman

REGULATR Necropolis
 REGULATR Glow
 REGULATR Regulators
 REGULATR Scavs
 REGULATR Boneyard
 RHOMBUS Vree
 RHOMBUS Rhombus
 RHOMBUS Talus
 RHOMBUS Elder
 RHOMBUS Scribes
 RHOMBUS Knights
 RHOMBUS Hub
 RHOMBUS Disks
 RHOMBUS Army
 RHOMBUS Boneyard
 RHOMBUS Paladins
 RHOMBUS Master
 RHOMBUS War
 RHOMBUS Exodus
 RHOMBUS Strange Army
 RHOMBUS Merchants
 RHOMBUS Missing Caravans
 RHOMBUS Children of the
 Cathedral
 RHOMBUS Initiates
 RHOMBUS Chip
 SALLY Chip
 SALLY Necropolis
 SALLY Set
 SALLY Watershed
 SALLY Hall
 SALLY Lou
 SALLY Ghouls
 SALLY Normals
 SET Master
 SET Ghouls
 SET Mutants
 SET Necropolis
 SET War
 SET Unity
 SET Hub
 SET Brotherhood
 SET Shed
 SET Cathedral
 SET Chip
 SET Hall
 SET Children
 SET Garret
 SET Set
 SET Muties
 SET Brotherhood of Steel
 SET Water Shed
 SET Children of the Cathedral
 SET Children
 SET Watershed
 SET Water
 SETH Khans

SETH Garl
 SETH Junktown
 SETH Shady
 SETH Hub
 SETH Water
 SETH Tandi
 SETH Aradesh
 SETH Seth
 SETH Razlo
 SETH Sands
 SETH Scorpion
 SETH Radscorpion
 SETH Scorpions
 SETH Radscorpions
 TANDI Aradesh
 TANDI Tandi
 TANDI Razlo
 TANDI Seth
 TANDI Raiders
 TANDI Well
 TANDI Scorpions
 TANDI Claw
 TANDI Junktown
 TANDI Hub
 TANDI City
 TANDI Scorpion
 TANDI Khans
 TERRY Chip
 TERRY Necropolis
 TERRY Set
 TERRY Watershed
 TERRY Hall
 TERRY Lou
 TERRY Ghouls
 TERRY Normals
 THERESA Chip
 THERESA Vault
 THERESA War
 THERESA Outside
 THERESA Overseer
 THERESA Water
 THERESA Waterchip
 TYCHO Junktown
 TYCHO Rangers
 TYCHO Chip
 TYCHO War
 TYCHO Wastes
 TYCHO Followers
 TYCHO Cathedral
 TYCHO Garl
 TYCHO Master
 TYCHO Unity
 TYCHO Set
 TYCHO Watershed
 TYCHO Necropolis
 TYCHO Hall
 TYCHO Library

TYCHO Overseer
TYCHO Medic
TYCHO Healing
TYCHO Vault
TYCHO Vault-13
TYCHO Vault13
TYCHO Killian
TYCHO Gizmo
TYCHO Boneyard
TYCHO Shady
TYCHO Sands
TYCHO Hub
TYCHO Casino
TYCHO Store
TYCHO Deathclaw
TYCHO Exodus
TYCHO Initiates
TYCHO Paladins
TYCHO Scribes
TYCHO Children
TYCHO Brotherhood
TYCHO Vats
TYCHO Military
TYCHO Base
TYCHO Apocalypse
TYCHO Mutants
TYCHO Morpheus
TYCHO Khans
TYCHO Tandi
TYCHO Alya
TYCHO Diana
TYCHO Gwen
TYCHO Petrox
TYCHO Tolya
TYCHO Booze
TYCHO Drugs

TYCHO Seth
TYCHO Aradesh
TYCHO Razlo
TYCHO Zimmerman
TYCHO Regulators
TYCHO Scavs
TYCHO Blades
TYCHO Nicole
TYCHO Lieutenant
TYCHO Psychics
TYCHO Experiments
TYCHO Police
TYCHO Merchants
VREE Master
VREE War
VREE Discs
VREE Brotherhood
VREE Chip
VREE Elder
VREE Rhombus
VREE Exodus
VREE Strange Army
VREE Merchants
VREE Missing Caravans
VREE Hub
VREE Children of the Cathedral
VREE Initiates
VREE Scribes
VREE Knights
VREE Paladins
VREE Holo
WTRGRD Ration
WTRGRD Rations
WTRGRD Supplies
WTRGRD Water

FALLOUT 2 "SECRET" - CAPTAIN OF THE GUARD

Ever wanted to be Captain of the Guard in Vault City? Well, it's simpler than it sounds. Ideally, Lynette is set up so that if you kiss her butt completely, your ability to give her ass a swirl is rewarded by making you Captain of the Guard.



If you're willing to buckle up and walk the dialogue minefield, you'll need the following things:

- Speech \geq 75% AND a CHR $>$ 7.
- Be able to speak to Lynette, the First Citizen of Vault City, *without* killing her. No small task.
- Choose *every* response that addresses her as "First Citizen," including "Bye" responses.
- Stop the raiders, show Lynette the account book you got from the raiders AND Bishop's holodisk detailing his affairs with NCR (located in Bishop's personal safe in New Reno), and then deliver the disk to Westin in NCR.
- When you get back, mission accomplished, if her respect for you is high enough, she awards you Captain of the Guard status.
- You will notice most of the Vault City citizen dialogues will change, especially Sergeant Stark, who will be none too pleased with your promotion. Take Cassidy with you to Stark for more hi-jinks and a little more XP if you confront Stark on busting up Cassidy's bar.

The best way to insure Lynette's **respect counter** for you is high enough is to find a loop in the dialogue where you can continually address her as First Citizen - after becoming a Citizen, the best way to do it is to keep asking her about Vault 13 (if you haven't found it), choosing the response of: **"First Citizen, it's very**

important to me that I find the location of my ancestor's Vault. If I may check the archives, I would be grateful." Loop it ten to fifteen times to be sure (you need at least a level 10 - I do it fifteen times to be sure), then just be sure not to anger her after that.

One final word, if you want to become Captain of the Guard, do NOT keep stopping by to talk to her if you are *not* a Citizen. This... irritates Lynette. Every instance of this should lower her respect for you by 1.

That's it for this update; Icewind Dale 2 and more exciting designer diaries call. You may debate, flame, or debate-flame me either at the address at the beginning of this update or on the message boards. Email is usually faster.

Until next time,

Chris Avellone @ BIS