

## The Socrates Blog

### *John's blog*

#### **4 July Year 1**

Dear friends back on Earth

Six months here in what we call 'Socrates'. These months have been overwhelming in intensity -- we just drop into bed every 'night' exhausted and there has been no time or energy for anything else. That is, until after dinner last night when six of us started reminiscing and all of us experienced an overwhelming sense of homesickness. What triggered this off was the announcement by the council that there was now enough energy capacity to allow for individual communications to be sent back to Earth, so the six of us decided to make a collective blog. It's quite scary to think that maybe five years will pass before you even get to read this. In fact as I write you don't even know that we have arrived safely and I will be 10 years older before I even get a reply from you. Incidentally, that is why we collectively decided a few days ago to abandon numbering years by Earth convention because we realised that the time delay and communication made the correlation confusing for a start and in practice we relate all time the only fixed point we know -- the moment of landing on the planet. Even talking of "days", "months", and "years" here is meaningless in terms of the natural environment.

With two suns there is never any period of darkness, just changes in light intensity and no-one has yet worked out the pattern of the cycle so that every moment is unpredictable. What we do know now is that the cycle has a 22 "year" (Earth year) timespan so that our "year" is 22 of yours. Apart from our presence there is absolutely no organic life on the planet so there are no external changes in the landscape to mark seasons. We have therefore adopted Earth's conventions of 24 hour days, 12 months and the 365 day year as the infrastructure to time. No doubt, as generations pass over here, different rhythms will develop naturally. Our "January 1, Year 1" is the day we landed.

But here we are on the planet we call 'Socrates' in the star system Alpha Centauri. My Gran and Grandad were born just as the first humans set foot on the moon, in their life-time, with technology unimaginable that their birth, one thousand of us (less the 3 who have died and plus the 17 born since we left Earth) are established on one of the system's fourteen planets. I know that you receive regular broadcast images and commentary from NASA. We'd like to simply tell it as we experience it and hope this interests you.

The seven-year journey, travelling at near the speed of light, to the system wasn't too bad. The vessel is vast so that even with a thousand people on board it didn't feel crowded and preparation program kept everyone busy. The scariest part was the utter unknown at what may greet us when finally we arrive at the Alpha Centauri system. We did not know whether any of the system's planets could be landed on -- we didn't even know how many there would be. This must have been a little like Columbus and his crew felt when first setting out across the Atlantic. The consensus grew among us that if Alpha Centauri offered nothing where we could establish ourselves we would press on to the next star system -- not a single one of us wanted to return to Earth. There was the sense of incredible adventure, and since we were equipped to go on indefinitely, with a new generation being conceived and born even as we travelled, there seemed no reason ever to turn back.

Well, as you know, we found that no less than four of the planets here had enough similarities to earth that we could land and colonise. We chose the planet we call 'Socrates' because it was the only one with a molten interior like Earth, generating a magnetic field that acts as a shield against harmful rays. Although there was, until we arrived, no organic life -- and therefore no oxygen -- on the planet, we know now that organic life can survive here and will, in time, create a breathable atmosphere. The planet is nearly twice the size of Earth and so its gravity is dense. However, it is remarkable how quickly we have adapted. When

we first arrived, to walk was next to impossible for any distance, especially in outdoor suits, but recently we staged a game of football! (The ball is extremely light by your standards).

Of course, the major determination of all was the presence of water, covering over half the planet. It is only one land mass and we still do not know enough about the geology to know whether it has plate tectonics as on Earth. The existence of volcanoes suggests that there may well be. Our maps are still quite rudimentary. We are established close, but not too close, to the ocean. The sea storms here have to be seen to be believed! Giant waves regularly sweep kilometres inland so we never ventured near the sea except by flying craft. Whatever develops on this planet, sea travel will never be an option – but then, with one landmass, that may never be an issue anyway. The interior of the land has an extremely hot climate – some areas reaching 100°C but here on the coast the temperature fluctuates with the variation in light intensity but in a very liveable 20 to 30° C. It is not beyond future possibilities that life could be good here in the open air.

Last week we made the momentous decision to release organic life on the planet – simple life forms that do not need oxygen to survive. I say momentous because our actions will change the eco-system on the planet forever -- and maybe the first "natural" life to exist on its own outside of Earth -- ever! Scientists are monitoring the results and will keep us informed. It's scary -- truly scary. We have absolutely no way of knowing predicting a long-term outcome of our actions. Will the future curse us or bless us?

That is enough of this blog. I am John, by the way, and my role in the colony is computer techie. I'm 23 -- just a teenager in the last years of school when I left Earth. The others who are contributing to this blog can introduce themselves.

### ***Luke's Blog***

#### ***5 July year 1***

Greetings to all. My name is Luke and I am here in the colony as Elder and grandparent. My wife, Lucia, was one of those who have died since our voyage began, and I miss her with an intensity that I could never have imagined. I'm grateful to John and the others for initiating this blog. I don't have anything defined for me except to have the time to simply be with people, reflect and counsel, talk to the children and tell them stories about Earth -- all kinds of weird and wonderful inventions of my imagination.

I miss my Lucia--- and I miss Earth -- both terribly. At a personal level, I wish I had never embarked on this journey but there is no going back and I comfort myself with the belief that I do play an important part in life here simply by who and what I am.

There is going to be a lot I want to write the future, but right at this moment I'm too full of pain to think clearly. I can see in my mind images of you all -- friends, relations, colleagues and countless others who I will never see again in the flesh.

### ***Frieda's blog***

#### ***5 July Year 1***

I'm Frieda and by the time you read this you'll be already familiar with my face from my regular transmissions. So you'll know I am the chronicler for the colony. Obviously, when I contribute to this blog, I'm not going to double up on what you see me say on TV. This is my personal take on what's happening and I guess sometimes you'll note it's a little different from the public broadcast. What you see on TV is a script that has been through several hands before I present it -- sometimes I look at things differently. Let me leave it at that.

There's a saying and I grew up with -- "The more things change the more they stay the same". Well, you know, you can't get much more different than living in another star system yet, with all this, what dominates my mind night and day? John and me. We got together a month ago and are now sharing quarters. One of these days we'll have a child and I am all in turmoil about that, a whole maelstrom of feelings. I'm madly in love and yes, I want children -- yet it has never struck me until now what it was going to mean to bring a child into this world in this place. John just laughs at my excitement and my terror, all mixed together, and then buries me in wild sex, but in the stillness that follows, when he falls asleep, I get the shakes and the sweats. (I warned you this blog would be nothing like my public broadcast! It's a funny feeling really: by the time I get a response back from you that tells me whether I should or should not have kids, I'll probably have a tribe of them.)

You know, of course, that I'm black. John's white. We have just about most of Earth's ethnicities among us but one thing very noticeable is that hardly any couple is a co-joint of the same ethnicity. There is something very amazing, almost magical, happening in this colony, something certainly beyond expectations. It is most visible in the cross-ethnic relationships -- only eight of the 17 children born so far come from the same ethnic stock and these are all offspring of relationships pre-existing before we left Earth. What is happening here, however, is much more profound. It is throwing off of the cultural frameworks from which we came in such divergent manner and an exploration of a totally new culture for a new world. As I write this blog, I think it will be about this that I will write most -- apart from my personal life!

I am conscious that, as you read this, six months having gone by since you received news of a successful landing, it is likely that preparation are being made to send more colonists to us. Seven and a half years ago when we left Earth, conditions were deteriorating at a frightening pace, which is why so much urgency was put into despatching us. The news we have here today is four and a half years old and nine years old when you read this, so I have no idea whether Earth can even send us more people. I worry though about such a move to send a new wave of colonists. By the time they reach here we will be a whole culture removed and I can foresee major problems in integrating newcomers with the established community. There is a vast difference between what is happening with regard to this colony from all previous human experience of colonies. I don't know. Maybe the regular TV broadcasts will help. I do wonder, though, whether new colonial developments should target other star systems rather than seek to reinforce this colony.

If I'm rambling incoherently put it down to the madness of a woman and love -- and scared about being in love.

More later.

### ***Timothy's blog***

#### ***5 July Year1***

Greetings all. You will know that I am bishop to the colony but maybe by this time the remarkable story of how I came to this position may have slipped from memory. Recognising that this colony may lose contact with Earth altogether and for all time, the Christian churches -- members of the World Council of Churches and the Catholic Church, in a show of unity never seen since the Reformation, consecrated and commissioned me as bishop of the Christian community in the colony and, for at least the time-being, any and all human settlements on planets out of the Sol system. There was recognition that there could be no effective future oversight from the Earth-bound church so the trust placed in me was without restriction other than my vow to keep faith with the apostolic tradition.

In her blog, Frieda has written of the extraordinary cultural transformation that is taking place in the colony and I am seeing this happen before my eyes in the religious sphere. My inclusion in the colony was controversial and, although two thirds of the members of the expedition acknowledged Christianity as their religion, of those less than half had more than a casual connection the church, and then, as reflecting the

state of religious life on Earth, scattered across a number of traditions. It has to be said that a significant number of people told me in no uncertain terms that I was not "their" bishop or pastor.

Advance seven and a half years to our arrival. On the day of our landing, before we undertook any actions other than to ensure our safety and security, the entire -- and I mean the entire -- community assembled for a service of thanksgiving. We shared eucharist together and even those who abstain came to the altar to be blessed! Nothing in my entire life has ever moved me so.

There are still vast religious differences of the community, yet now I am universally acknowledged as pastor. The reality is that everyone -- Christian, Muslim, Jew, Hindu, and Buddhist -- is experiencing massive and unexpected dislocation to the tradition to which they belong. This is powerfully so for the Muslims with their tradition of orientation to Mecca for prayer and the requirement to make a pilgrimage there in their lifetime. Some Muslim tried facing up to the light of distant Earth but experienced such alien sensations that they abandoned this. Even for us as Christians, the stories of the Bible have taken on a sense of alien encounter that is causing acute discomfort.

Perhaps the most extraordinary development of all is that every single one of the 17 children born -- several to parents who are not Christian -- has been brought to me for baptism. Parents universally say that the rite grants a sense of belonging to the community. No less than 50 adults have been baptised since the voyage began.

All of this is presenting a vast range of issues to be worked through, as well as the pastoral work of caring directly for each and every person. I feel acutely isolated, even though I have in the digital library just about every theological book ever written. I talk with people as much as possible and I find that there is not one with whom frank and open discussion of issues is not possible, be they of whatever tradition, scientist or whatever. I have been made a permanent member of the governing Council as so many of the issues we have to confront are either ethical or created by our diverse cultural backgrounds. I am also the only member of the Council who knows everyone in the community not just by name but also with some depth of relationship.

I'm aware that little of all I am saying here is appearing in the official reports and transmissions sent back to Earth. The council is aware that some of what is happening will prove controversial and indeed disturbing to some sections of the Earth's population.

So in this blog I'm trying to interpret what is happening and how we're dealing with it. Like Frieda, I am finding my biggest anxiety focusing on what effect the arrival of new colonists might have in the future, but I suspect this may not happen for at least another decade and, if that happens then we'll meet it as best we can.

Now it is the time evening prayers so I'll sign off. If I can manage it, and now I'm fired up with the blog idea, I may make another entry this evening.

### ***Timothy's blog number 2 for the day***

#### ***5 July Year 1***

As I had hoped earlier, there is some time now before I go to sleep when I can continue my earlier blog. This is not an idyllic community. There are manifold tensions and discords, as it has to be expected in any community of human beings, let alone one with such a diversity of religious and cultural backgrounds as we represent. It does not help to paper over these and pretend they do not exist. Ethical issues dog our lives are just as on Earth and consensus is difficult to achieve -- if not, sometimes, beyond reach.

I have interpreted my role as being able to have a quality relationship with each and every individual in the community, even when our religious vision (or non-religious vision) differs substantially or we take different positions on ethical issues. I have to acknowledge that in this respect our community differs from probably any earth-bound community in that the ability to sustain relationships was a pre-requisite for participation in the expedition. Remember, too, that the IQ average is in the range of 112 to 120 and every one of the adults has been well educated and skilled at their field. So it has not been difficult to build these quality relationships.

What has been much more difficult is to take those relationships a step further and ensure that quality relationships are built between people in the community -- and that no one is ever excluded from the sense of belonging to the community. I have to say that this is the hardest and most time-consuming part of everything I do. Part of the reality created by the selection process back on earth is that, while indeed quality of relationship capacity was taken into account, the outcome meant that nearly every one has a somewhat oversized eager. THAT does cause problems and from our first day until today.

Fascinatingly, though, it was this very fact that lay behind the extraordinary unifying of the community that I wrote about in my first blog. There developed a real anxiety, within months of the start of the voyage that are that we would come to blows and destroy each other. That was a huge bust-up that came very close to murderous violence. We pulled back from the brink and, when the emotions receded, realised together that we had come perilously close to self-destruction. That was when one of the Islamic women stood up and asked "our bishop" to lead us in prayer. It was a turning point and a recognition that we had to discover a new way of relating to one another. When, in the service on landing, I spoke of agape/love as the fundamental ethic of our whole community, there was not a dissenting voice. Translating that ethic into concrete practice is another matter altogether, but the cultural value of the community is that underneath all our divisions and discords, we have come to this common mind that to love one another is the one ethical absolute of our life together. I have to stress that we are far from living that ethic, and I wonder if it can take sufficient depth of root to hold out against future strains, but that we are where we are is something I celebrate and can only leave the future to the grace of God.

What is most important for me is that I lived at agape life to the fullest of my capacity. If I cannot do it than I can expect nothing from this community, and the community needs to see in me a model of how agape can work in practice. It is not easy and I fail every day. If I did not have between me and God the fullest experience of that agape, embracing my daily forgiveness and restoration, I would fall into black despair. As it is, I am renewed daily, and I do see its fruit.

## ***Samantha's blog***

### ***6 July Year 1***

I'm surprised the others would let me contribute to this blog. The others are enthusiasts for the colony: though I empathise with Luke's pain and ambivalence. For me, a scientist, this is an expedition that exceeds my wildest dreams as a scientist. As a colonist, I have no illusions. I can't see it surviving and being a permanent feature of at least this planet.

If it wasn't for Bishop Timothy we'd all be dead already -- and I mean that literally. If something were to happen to him the destructive forces that run through this community would once more burst out onto the surface. If this were a purely scientific expedition, there would be no problem with the diversity as, in the scientific community, we are well accustomed to living with diversity because we communally accept that methodology that unites us.

This expedition was created with the vision of being a colony, and that was a mistake. There was no vision behind the whole enterprise other than to get a colony to another star system. We were driven, all of us, by panic that time was running out for humanity on earth -- and maybe it was or is. But sending such an incoherent diversity out to live on a distant planet was madness. OK, so I'm letting go of my spiel that I

generally keep to myself here but it is the truth. You back on Earth, please, please don't send out more colonies like this!

### ***Frieda's blog***

#### ***6 July Year 1***

I've just read Sam's blog and I am shocked. I respect her as a friend and as a damned good scientist but she is wrong, dead wrong. Okay, I'll admit that there was this real driving passion to get a human colony off-planet before conditions changed so that it may no longer be possible. Was that wrong? From what we know now, though years out of date, conditions have got worse environmentally and economically since we left and maybe we were able to take advantage of one short window of opportunity that even now may be closed, perhaps for ever. We were right to make the break: of that I am convinced.

Sam criticises the diversity of those of us who came. I may be doing her an injustice but I think she considers that the choice should have been nice, white middle class Harvard-educated science boffins like herself -- no black trash like me -- and that no evil Moslem terrorists. Oh, and we should carry the American flag with a copy of the Constitution.

Yeah, I'm angry and I'm hurt, too. We are going to make this colony work. Sam, we are going to make this work.

### ***Frieda's blog 2 for the day***

#### ***6 July Year 1***

Okay, I've calmed down now, and Sam and I have had a talk and a cry. I'm sorry I said those things in the last blog but they were sent off so there's no recalling them. Let me then put on my chronicler's hat and try to set down the sequence of events and rationales behind us being here in the way we are. I know there are heaps of books and articles been written and being written about this voyage and colony but perhaps it might help to hear the story from the perspective of one "on the ground".

Everything started back in the early years of the century with the discovery, kept firmly under wraps for nearly a decade, of both the anti-gravitational technology and the associated drive chain that was to enable us to reach near light speed in travel. NASA originally thought it would take 20 to 30 years to translate the theoretical physics into usable technology but, on the one hand, there were unanticipated technical breakthroughs and, on the other hand, the massive climatic and environmental changes that accelerate d swiftly from the end of the first decade, the economic and social chaos that was beginning even then to engulf society and the astronomical rise in energy prices once it was confirmed that peak oil production had been passed several years previously, all combined to create the climate of desperation Sam does rightly refer to. When the potential of the new technology was leaked, the pressure to create a human colony off-planet became a tidal wave and we were no longer satisfied with just the moon or Mars. Now we could travel to the stars nobody was going to be satisfied with remaining in the solar system.

Whatever the rights or wrongs of sending a diverse community on its way, the reality is that the entire global community became caught up in this momentum. It was controversial enough that it was laid down that everyone going had to be able to communicate fluently in English but any other attempt to put constraints other than the exclusion of major genetic or communicable disease would have caused a worldwide conflagration. God, I recall the hysteria because several of those chosen were gay, including the expedition leader -- who is now our president.

Let's get the motivation straight. At the time -- and I don't know the present situation -- there was a real and palpable fear that humanity's reign on earth was coming to an end -- even to the point of extinction. Furthermore, with the global economic system was in tatters with little hope of recovery to anything approaching the previous century's level of material prosperity, we all saw the window to achieve this gigantic technical leap as being open for a very short time and then perhaps closed for ever. It was then or possibly never.

From conception to launch this expedition took only five years, and extraordinarily short period of time for such an extraordinary venture. Yet I think it was only this violently condensed time-frame that enabled it to succeed. The sheer speed of the momentum mowed down a multitude of political and social roadblocks that would have killed the project in any other circumstances. The sheer scale of the social chaos around the globe, the monumental task of keeping the ever-rising tide from engulfing our coastal cities and coping with floods of environmental refugees meant that nobody had the spare energy or will to focus on the issues around this colonising venture. Perhaps this too became part of a once-only window of opportunity for the project. In saner, more stable time, the forces of inertia may have proved too great.

Bishop Timothy wrote of the extraordinary decision of all the main Christian denominations to consecrate one man as bishop to all. Only the sheer scale of the human tragedy being played out across the world could have succeeded in sweeping away centuries of ossified ways of thinking and enabled such a breakthrough to occur. And Sam was right about one thing -- that that decision of the churches surely saved us. Of course, the scientists and technologists are vital to this expedition and colony. We couldn't get here or continue in existence without them. But without the spiritual unity Timothy has brought us, even in our diverse views, we would now be dust and the science and technology mean nothing.

There is another issue of diversity I want to comment on. Yesterday I talked about having children. In this colony we have brought together a vast and diverse gene pool and everything I know about genetics says that this has got to be good the future. The more we mix the gene pool the stronger the chances are for the future. Perhaps I should have children not just by John but 10 children by 10 different fathers and every woman in the same. Just kidding! It's the point, though.

So that, in a very brief summary, is how we came to be here in the way we are, and, like it or not, Sam, this is who we be.

## ***Madam Lu blog***

### ***6 July Year 1***

Hello. My name is Lu, known to you on the TV as Madam Lu of the Council of Leaders. My portfolios in the Council are the environment, energy and food production. Born in Shanghai, China, I was a citizen of New Zealand at the time of my inclusion in this venture. I have got doctorates in nuclear physics from Shanghai University, environmental science from Cambridge University and agricultural science from Massey University in New Zealand. However, it was none of these that led to my inclusion in this community. Rather, it was my husband, Sione (whom everyone calls Sonny) who was invited to join though he has no qualifications beyond high school. What he has is immense strength: over 2 m tall and 145 kg of muscle, he has the power of an ox and is a tremendous athlete. I once joked at a conference VJ Singh, then the Project Leader and now our president, that the expedition needed to take along an ox-man and that is what happened! We already had three children (now six), so here am the family and I.

Let me say a brief word about my particular portfolios. I am responsible for monitoring the quality of the internal environment of the colony but also for decisions relating to our impact on the planetary environment. It was my decision to release the organisms that an earlier blog referred to.

The single most important responsibility I have is for the nuclear power plant, both its safety and maintenance, since on that we currently depend totally for our energy needs and require it if we ever have

to relocate. In addition, though, I am charged to find and develop sources of natural energy on the planet, and there is a great deal of scope for that. Obviously, there are no fossil fuel deposits, but there is waterpower beyond imagining. We have located the settlement near a river that would rival the Amazon on earth, yet it is only a tributary river to one we have named the Mandela, the size of which makes the Amazon a back-yard ditch.

Then, around 100 km away there is a huge geothermal field -- and, of course, endless sunlight. So I foresee that we will never conceivably run short of energy here from a variety of sources. What is at the heart of the problem is that the colony simply does not have sufficient people to be able even to begin to exploit such natural sources. In this I differ sharply from the sentiments expressed by my fellow bloggers about not sending more people to us.

What really limits our capacity to absorb more people into this community is the area that concerns my third portfolio -- food production. We brought with us (being able to control gravitational force in our craft) a wide range of domestic food-producing animals and an abundance of seeds and plants. At this point of time the animals are far more of a burden on our food-producing technology than what they contribute, to the point where, on several occasions we have brinked on destroying them all or face starvation ourselves. We have constructed a vast 'farm' where now we can at least let the animals out to roam, but to date have had no success at all in establishing anything to grow naturally so everything still rests on artificial production. This is my single biggest worry, for the system has a limited life and unless we can solve the production issue we will eventually run out of food: that is, unless we get resupplied from Earth.

Besides my direct responsibilities, I have, as a member of the Council, concern for the entire well-being and direction of the colony. I welcome the opportunity this blog will give me to comment on all of these things as they develop in the light of unfolding events.

### ***Timothy's blog***

#### ***6 July Year 1***

While I appreciate the compliment Sam paid me in saying that the community could not survive without me, I not only doubt that it is true, I also would dispute that it was I who saved the situation in the earlier crisis. At that critical moment, it was the process of communal wisdom that drew us collectively back from the brink and I think that if anyone other than a Moslem woman had suggested my intervention there would have been no acceptance of my role. If anyone's intervention can be called 'saving' it was hers, not mine. Even then, had there not been deep resources of communal wisdom, anything I might have done would likely have proved useless.

That is why I have much more confidence in the long-term prospects, aside from external circumstances, for the community than does Samantha. Apart from ego issues I referred to earlier, this is a uniquely stable community of people from a psychological point of view -- something the colony's psychologists confirm for me.

We are developing quite unique ways of handling psychological health here, one of which involves Sonny but that is a story for Madam Lu to tell when she is ready. The biggest psychological toll we all experience is the recognition that in our life-time will never be able to be out-of-doors without breathing apparatus and we don't yet know enough about other dangers to be free of protective suits. I think that Madam Lu's agricultural project, getting grass and other plants to grow, even within the dome, will have effect on us way beyond providing for food. There are times when my greatest longing is to feel grass between my toes again.

Another unexpected pressure on our psyche has been the permanent loss of darkness, of night. Within the colony structures we create artificial light by shutting out the suns and observing the 24-hour rhythms of earth, even adjusting the length of days to our old rhythms of the earth seasons, but we all are conscious of

its artificiality. In the end, I am sure we will break with our old rhythms and find new ones. I already observe the beginnings of this in the children who are starting to push the established boundaries in the way young people do.

Another stress has turned out to be the communication lag with Earth. While we were travelling at the speed near light no communication either way it was possible, so for seven years we were completely out of touch and this strangely seemed not to bother anyone. Now communication is possible, the agony of a nine-year turn-around in messages, the fact that, at this moment when I record this you do not even know we are here and safe, that we will never have up-to-date information about loved ones, let alone the state of things back on Earth, is affecting almost all of us to one degree or another.

What is a new experience for humanity, at least since the emergence of the modern age, is the sense that we have reached an ultimate physical barrier beyond which it is impossible to go. We now travel at close to the speed of light and that, we assume at least, is an un-unassailable limit. Communications and travel will never go any faster -- ever. Our state of dislocation in time from you is permanent for all time to come. This is a culture-shock for the scientists among us, one that is felt throughout the community. If anything really threatens the psychological health of this colony it is this above all other factors.

Interestingly, this is producing surprising effects in the area of spirituality but I'll write about this another time.

### ***Samantha's blog 2 for the day***

#### ***July 6 Year 1***

I am going to beat Timothy to the post in writing about what is happening spiritually and not because I want to upstage him, even less contradict him, but, after all, you expect a bishop to write about spirituality and here am I, a quantum physicist. The reason why I seized the opening Timothy created is that it is the spirituality we discovered on this expedition that has kept me sane. Some might dismiss it as a defence mechanism and maybe it is. All I know is it works, at least for me. In fact, it's another reason why I believe, despite his protestations to the contrary, that the colony could not have survived with out Timothy's presence. It is he who has given the lead.

Before leaving Earth I belonged to the camp of scientists who dismissed religion as bunk and embraced the world as purely physics. I respected religion as important to other people -- I did not join those who protested Timothy's inclusion among the colonists: but it was in my view a simple exercise in illusion.

For the first six months I'd paid Timothy no attention other than the passing acquaintance of a fellow traveller. I did become conscious that we were going to be -- as Mme Lu has identified -- extremely short-handed for the number of tasks that would be needed and had questioned the wisdom of having someone who was just useless baggage on board when another lab technician would have been of greater value.

The crisis six months out dramatically changed that evaluation of the bishop but did nothing to change my stance on spirituality except to shift it towards the recognition that the illusion seemed fundamentally necessary -- which I found it very odd position to hold.

Over the next three years, I so busied myself in theoretical physics that I cared little for anything else going on, revelling in the fact of this ability to focus completely and without any other external concern. Then, late in the fourth year, a tangled emotional relationship broke the focus and in the fall-out from that I became profoundly disillusioned with the entire enterprise -- which, as you will have noted, I still am. I became consumed by anger and self-loathing that I had allowed myself to be drawn into this situation in which there could be no escape. The anger burst to the surface when Bishop Timothy approached me as "pastor". I abused the hell out of him for his presumption, losing complete control of myself in an outburst of fury and frustration. He didn't flinch and he didn't defend himself. All my anger seemed to go through

him like electricity through a lightning conductor and down to the earth. I stormed out on him, maddened by his passivity but as soon as I was out of his presence I felt utterly drained -- almost hollow. I slept for two whole days then asked to see him again.

Timothy offered me a model. I'd heard it before but refused to countenance it. Now it began to make sense. As a quantum physicist I knew that physical reality was ambiguous: how we perceive reality at the quantum level depends on the question to which we seek an answer and contradictory questions received contradictory answers with no way of reconciling the contradictions. That I know, theoretically and experimentally, is the fact of physics. Timothy's model applies that frame of reference to reality as a whole. I ask physical questions and I get physical answers and if I ask "God" questions I get "God" answers. The two sets of answers cannot be co-related or partitioned and flatly contradict each other but that is the fact of reality.

Being an experimenter by nature, I tentatively, very tentatively, asked "God" questions of reality and was shocked to get real answers: and that has gone on. In exploring the reality exposed by the "God" question I found that I have never ceased to be the "scientist" in that I have never ceased to be sceptical, am always "testing", never satisfied that I've got anywhere near the solutions I'm looking for. I have certainly never ceased to be a quantum physicist but find that the spiritual and physical quests go hand in hand and I move between them freely and openly.

I think that's all I wanted to say at this stage. Whatever the truth or otherwise of Bishop Timothy's role towards saving the whole community, I attest he saved me.

### ***Frieda's blog 3 for the day***

#### ***6 July Year 1***

John thinks we've all gone mad writing so many blogs in just a couple of days. He envisaged that between the six of us we might write one blog each a week. He never envisaged setting in motion the avalanche of blogs that have emerged these last two days. A few minutes ago, when I set myself to write this, he said, "But nothing much happens here on a day to day basis!" In fact, this blog has become a happening in itself and is turning thoughts and feelings and energy that is leaving us all a bit bemused.

In effect, Sam has laid down a challenge to the rest of us. And what if she's right and this whole enterprise is a farce? I've had to sit down and think, what are we all about? Not just the words I churn out for public consumption both in the colony and back on Earth but deep down, my convictions about what this is all about.

Then I thought of the way we've released living organisms into planet's environment. In all the billions of years since its formation, for the very first time there is life existing free on this planet. Whatever happens from here onwards, that life will evolve over perhaps billions more years -- into what? An irreversible process has begun and I find it awesome to contemplate. This may be the very first outbreak of life into the universe. Even allowing for the unpredictable outcome of what we have done, I am glad and in a sense do not care if nothing further is ever achieved and we all die out here.

We came, though, to achieve so much more than that. We will pioneer the spread of human life eventually through the galaxy if not the universe -- to millions of planets. Even if no further expedition leaves Earth, we do have the capacity to take our craft almost infinitely further, leaving colonies like this scattered across space. If other voyages are able to leave Earth they won't necessarily come here. There are three other colonisable planets in the system alone and for many voyages this could be simply a way-station and a training ground for ventures far beyond.

This might be a fight of the imagination but even now this vision is technically feasible. There is nothing beyond our will and courage to prevent it happening.

Sam has spoken of her spirituality. Mine is different: I believe that there is a spiritual calling for humanity to populate the universe. A few years ago that might have appeared to be made to megalomania. Not in my book, not today and not given what I've seen here of what we can do.