UFO: How It Ended: part 2

by Anthony Appleyard (Anthony.Appleyard@umist.ac.uk) This story is written in a development of the fictional world of the 'UFO' space fiction series by Gerry Anderson that was shown on ITV (British television) in the 1970's. The 'HR' star serial numbers are in the Harvard Revised Photometry catalogue, see e.g. the Bright Star Catalogue published by Yale University, New Haven, Conn., USA.

SUMMARY OF EVENTS SO FAR

I am Commander Ed Straker, commander of SHADO, trying to patch up Earth's space security after recent events. The alien threat seemed to be gradually receding, until four UFO's drew my Interceptors and planes away, letting six others get through. They landed in Scotland, hid in a lake, waited, and 15 days later got away. They made disastrously successful use of that landing. By tapping satellite phone links they tricked or enticed some human electronics students and armaments designers into going with them and aiding them. From them the aliens got new weapons and were all too thoroughly shaken out of their long-term stasis of sticking to the same technology, and SHADO could no longer routinely stop them from landing; one attempt to stop them cost me all three of my Interceptors in one day, and they destroyed SID soon after. Two of these landings were at Arden on the west shore of Loch Lomond in Scotland, seen close up by tens of thousands of people and utterly unhideable. In breach of alien official policy, a faction among the aliens, later backed up by their local command, made more public contacts with Men who wanted interstellar travel and helped them to set up space kit factories on Earth. From this the aliens got very many new ships and much supplies before Earth policy could coordinate itself properly again. The aliens proved to come from a planet orbiting the star HR4918 (mag 6.31, RA 12 57 33.1, decl -22 45 14 at AD2000 precession epoch). They call themselves the Karsa, a word of their language meaning 'The Nation', and their language Karsin.

During all this sensation SHADO's cover was blown, and its existence and purpose are no longer secret. I all too well remember the public excitement and fascination with all things alien, when it came out at last that there was something out there; and more came from a general election which fell due in Britain during it. Various uncoordinated groups of Men, and fortunately also SHADO, now have FTL (= 'faster than light') travel and UFO-type technology and weapons, and have contacted or encountered more alien races. One of them is the Iwani of 27 Orionis III; long ago the Karsa persistently raided there for transplant parts until the Iwani set up their Space Guard, an armed secret space agency which for centuries efficiently destroyed all other native space attempts and everything that came from outside, including one day every one of a fleet of 147 Karsa UFO's. Luckily Earth found this from space navigation information of Karsa origin and not by the hard way by losing ships and men there. Later I led a fleet there in a remote hope of contacting them for help and advice, but took away only news of disaster, for the Karsa with new weapons and new big warcraft had broken in there also and set off the Iwani into space-wandering for its own sake. An arms race threatened to develop between the Karsa and SHADO.

SUBSPACE

Because of all this we were extending our Moonbase and building more hard silos for spacecraft. Nearby establishments on the Moon are a security worry; before the big secrecy blowout we mostly managed to pass ourselves off as a scientific base, but, alarmingly, an overheard radio message from an all too near mining base called Dalotek once called us 'our neighbours the military'. Builders called in to build secret establishments are another security worry, but now the world and his wife knew of us and we had little reason not to use outside contractors, except in security-sensitive parts such as around our Utronics equipment which detects incoming UFO's before they slow from FTL (= faster then light) speed. Utronics was thankfully still secret; so far we had managed to keep the public thinking it was like ordinary light-speed radar or magnetic field detection when they heard the word and wondered what it was.

Dr.Jackson, our doctor and psychiatrist, was in Moonbase to see conditions there. "The workmen have landed." he said to Foster, who was running Moonbase at the time, "Their ships' airlocks are both doors open as usual, that type seem to live in a spacesuit. Some of the new suit designs with the fancy long-trip life-support kit are getting more and more like one-man intensive care wards, built-in heart monitors, automatic heart restarters, options for built-in artificial kidney or automatic drug-doser, etc. I once even found a man who was running his suit in autoventilate mode all the time. I have enough mental conditions to treat without adding spacesuit dependence to them."

They came in, and were examined to check that they were fit and human. One of their suits was Karsa-made, but its contents proved to be mentally and physically human. One of their electricians was a John Eltham. His spacesuit was a make that Foster had not come across before, but the men's spacesuits were such a variety that he paid little attention to that one above the others. Their foreman's spacesuit was the usual astronaut type, but his helmet and life-support backpack were painted fancifully with Star Trek type Earth and Klingon warcraft chasing about. I don't like broken colour patterns, as it tends to act as camouflage breaking up their outlines when visibility is important for safety. Foster told them what to do and went back to the operations room.

In there he kept an ear on the workmen's suit radio frequency, privately by deaf-air earpiece. They clearly needed a sharp reminder about radio discipline and not cluttering bandwidth with chitchat. At least they knew of passing an intercom wire so two near each other could talk privately. He overheard tales of their wanderings. One of them had been in a ship that nosed round the Tau Ceti system until several Karsa ships of the spinner type arrived and chased it off, and had then tried its luck around several nearby systems including Zeta Reticuli and Beta Centauri. That sort of incident is one reason why I wanted better control over who goes into space and where and with what kit. John Eltham in recent weeks had had bouts of some sort of 'space nerves', but he was too good an electrician for his foreman to get rid of him just for that, and it had not shown when he was out of his spacesuit being examined.

"Object condition change" a big computer screen in Moonbase operations room displayed, and coordinates and route.

"There it is. Something's making the image pulsate. I hope it isn't that link wire fault again." one of the staff said, pointing on the screen to a small group of letters 'UNK 437', "It's one of that bunch of UTC-sized images near Neptune." UFO-Type Craft made by humans are officially called UTC's, but many call that shape of craft a UFO regardless of who made it,

causing yet more confusion of word usage with genuinely unidentified flying objects.

"Incoming ships, four." the screen displayed, and coordinates and route, and four more 'UNK' (= 'unknown') codes coming from another direction. Foster knew that these four were probably a known scientific party; when they slowed below light speed and were near enough for ordinary light-speed radar echoes not to be too badly out of date, their codes would change as the radar beam activated their IFF's [= Identify Friend or Foe], if they had any; until then they were yet more UFO's to keep track of. So much complication: time was when, whatever came, we blew it out of space and time unless it was very good at dodging.

"I've not seen flashing quite like that before." one of the girls said, and then over her shoulder "Sorry, you're not allowed in here." to an off-duty patrol craft pilot who had wandered in for lack of anything better to do, as Foster was distracted by a loud gargling and flushing noise in his earpiece as the workman in the Karsa spacesuit left his suit radio transmitter on while he went into air-breathing mode.

"Wait a minute ..." the pilot started, but a guard started to push him out.

"Excuse, that echo, hang on!!" the pilot continued.

"No, you're not allowed in here. You've got your rest area."

"Oi! Excuse!! That's Morse code! I was in the Navy before I came here."

"Why should a Ufo pulsate in Morse code?".

"It just is. Unless your Utronics stuff's picking up interference from sea ship radio or something." Utronics as we have it is very sensitive to natural signals such as from lightning, and Earth's grossly and loudly cluttered radio spectrum, and is not happy operating through a dense atmosphere, which is why we needed SID and cannot scan for antilunar UFO's from Earth or from low orbit.

"OK, OK, whoever uses or teaches Morse any more!?" Foster complained, "OK, someone dig the signalling manual out and play that signal back."

"Hang on." said one of the girls, "One of our programs has got an option 'decode from Morse', hardly ever used. All that super-advanced stuff that's about and someone's still on Morse." and frantically typed and moused about on a computer, and then said "Here it is." A screen displayed two and a part repeats of "sos sos man ill in space qry hart atak eta in ufo 1730 gmt ne gate platt fields pk manchstr uk hav ambulnc redy".

"Leave it." Foster said, "Standing orders. No civilian rescuing if it risks secrecy or endangers success of an operation. Also, risk of patient seeing secret stuff and then being too ill for amnesia drug."

The pilot's SHADO training to put emotionlessly efficiently destroying targets as ordered before everything else broke down. He said something unprintable naval and "traditions of the sea" and "passed by on the other side" and ran at a radio link to Earth console regardless of the consequences.

"OK, OK, one of you pass the message on. Hook phone as if in Manchester UK, ring 999." said Foster, and then radioed me in my headquarters in England about what had happened. I wanted to radio the ship to re-route it to a secret area, but no hope of that until it was within reasonably short signal transit duration radio range. It was one sick civilian versus what remained secret in Earth's defences against the Outside. Even at incoming UFO speed, it takes time to reach Earth from Neptune, and Foster went back to duty. Eltham kept backing into corners as the vastness of space closed in on him; his mates kept ordering him back to work. Soon after, he came in and unsuited; Dr.Jackson examined him but found nothing wrong, but wanted to invalid him out, but his foreman refused.

The ship sped in, slowed below light speed, and its IFF activated. It passed close round the Moon to slow quickly by the 'whiplash effect'. Its crew put the patient's spacesuit into air-breathing mode and set its oxygen setting to maximum as it descended towards England. I wanted to redirect it to the secret area at Warton near Preston, but before I found its radio frequency it reached atmosphere and hid itself in a radio-opaque fireball of air plasma-ified by deceleration heat. After it came out of that, I contacted it, but its pilot was not familiar with remote corners of Lancashire and in his emergency for his crewmate refused to deviate from a beeline to the nearest safe landing ground that he knew of to the most hospitals that he knew of. The lawn across Oxford Road from the university museum would have been better, at the cost of squashing a Jap-cherry sapling, but he did not remember the place in time. As he came in over the boating lake and the trees round the unclean fenced-off Platt Brook, passers-by backed off. He fired a heavy plasma beam gun at the ground, low power to warn people away, then high power, abolishing a tree and melting to slag ten feet of park railings and two steel bollards that would have stopped the ambulance. He landed. I had sent an armed squad there in case, but the ship's crew proved to be what they had claimed to be.

It was the evening rush. Traffic already dense and slow choked completely as drivers stopped to 'watch the flying saucer land'. Two men who had ridden in the ambulance from casualty swore at the mentality of people and jumped into the spacecraft and told its pilot where to fly to a hospital garden to land crushing rose bushes to get nearer to casualty. The crew had got the patient partly out of his spacesuit. When one of the casualty men took shears out, a crewman's hand went to a holster: spacesuits are valuable. The casualty men did not like being balked in their trained routine destruction of clothes, but those spacemen knew how to get their type of spacesuit and undersuit off as quickly properly, since he had no bone or flesh injuries, only the heart attack. SHADO had told the hospital to tell the ambulancemen that the ship's arrival was scheduled and known of, but many spacemen had already guessed the truth. Again secrecy and saving lives had collided. Litter and pieces of shrubs chopped up by the ship's spinning girdle of 'gravity plates' flew everywhere as it landed. Men rushed out of the hospital with a stretcher, swinging a pickaxe handle and an amputation knife at obstructing bush branches and cursing all parked cars and ornamental gardeners. They got the patient to a bed, and he survived.

By Moonbase, men were digging to make a new hard silo for small craft. Geologists poked about and took samples. Moonbase is in the crater Riccioli, among rocks older than the oldest known on Earth, smashed and resmashed by aeons of asteroid and meteor impacts. The only thing anything like sedimentary layers was an occasional big outthrow of debris from a big impact, such as the 'Hevelius formation' caused by the impact that formed the nearby Mare Orientale. The utterly waterless and hydrogenless mineralogy of the unEarthly rock that the men were shifting told of ancient disaster; some guess that the Moon was reassembled from the smashed splattered remains of the crust and mantle of a Mars-sized body that hit the young Earth.

So the men dug, interrupted by big buried boulders that needed shifting specially. The four ships came near enough for their IFF's to activate; they were what Foster expected. Their crews had been making detailed star pattern surveys from several points a few dozen light years apart, so that distant stars could be located in three dimensions accurately by far longer parallax bases than the Earth's orbit's diameter that men had to manage with before they had FTL space travel. As they came near, a short-range radar activated to track them. At the silo site John Eltham backed away from the hole, for he knew that evil beings were about to slither

out of it. The scientists whiplash slowed round the Moon and went to a sandy airfield at Coonabarabran in the Australian outback near the Siding Spring Mountain observatory. Soon after it came two Karsa-type spinner craft, twice as big as usual and without IFF's, but the government of Uruguay said they were expecting them, and Foster and I sighed tiredly yet again. Something came out of the hole, but it was only yet another house-sized boulder of anorthosite breccia rock being winched out of the way of digging. The short-range radar switched off. Eltham wondered what had come over him and went back to deepening a temporary access ramp. The work went on.

I set off from my office to an ASC (Astrophysical Space Committee) meeting in London, by car, for I had seen enough for a while of the insides of UTC's. I was still not sole master in the spaceport that had developed round my headquarters: this was one of the many matters that I planned to raise at the meeting. At last the caravans and converted goods containers and Portakabins were getting fewer and proper buildings were being built and the area was more presentable. I passed Harlington Grange Farm, now the spaceport control block. Its door guards were in security-type uniforms with NASA badges on. I saw with a tired feeling of inevitability that one of them was a Karsa alien; once few ever knew of them, but not now. He handed me a bagful of mail. More than half of them were for Harlington-Straker Studios, SHADO's now blown cover which I had closed down as a now purposeless consumer of my time and attention. Three of them were film scripts hopefully sent in by film fans whose minds had still not managed to crosslink recent real space events with anything in the movie world; I flicked through them and later sent them to the BBC. Much of that mail went in the bin bag; we are no longer a film studio, and we are not a public space exhibition or the Red Arrows: we have too much else to do to answer fan mail. The next that I opened was about faults in the plot of a film that I had produced; how long ago and strange it seems when the public knew of us only as film-makers. I reached the gate in the new extended security perimeter and set off for the motorway.

I got to the meeting. Assorted aircraft and spacecraft stood in the building's grounds. Until recently, but it seems ages ago, some of them were known only as briefly-seen illusory shapes, the delegates to these meetings were all like-minded Earthmen, a few in uniforms and the rest in respectable office suits, business went quickly, and SHADO got its appropriations with little trouble and no security leaks. Now a larger meeting room was full of people with contradictory aims. I looked round at the human and off-world spacesuits, spacesuit undersuits, and overalls, and wondered where to start sorting out who was likely to support what. As we looked for our seats, astronomical star catalog designations on some of the name and organization markers in front of the seats added another unreal touch; the familiar organizational meeting atmosphere seemed to be replaced by a wind blowing in from endless cold remoteness and far stars. Despite all SHADO's precautions, the Outside had got in, and aliens were openly among men. I wondered which language would become the usual language of space contact; it would not necessarily be English. Trying to coordinate this sort of thing is not what General Henderson appointed me to run SHADO for. I again wondered if I would ever see the alien homeworld, and if so, how: abducted, or visiting in peace after a treaty between us and them, or leading an invading army.

Among all this the original reason why the Karsa came to Earth despite risks has not gone away. A SHADO standing order still bans off-duty contacts with aliens, and says that inadvertent contacts must be reported, a rule once only formal and theoretical, but now all too relevant. And it is hard to avoid them. Khlîvakaghd Ekhkukhvâranib was there, alien MP for

Derby North, a Karsa, the species of my long-term raiding enemy, in an NSDP (North Derby Space Products) factory overall with navy-ish shoulder badges and wearing a big packful of papers and files. Bringing a rucksack into a meeting instead of a briefcase for papers and a suitcase for other stuff looks non-fitting, but that was low among my concerns. On his left chest was a small badge of a cheetah-like alien animal standing over a teargas cartridge, as a rebus spelling of his first name. Karsin is not among the more attractive languages to hear, nor are the sentiments expressed by their usual style of personal names. 400 light years away on his home planet the *ighd* and the *kaghd* hunt on bare mountainsides and dry gullies and live their lifetimes with all the organs that they are born with; not so their sentient kin who use their names, and from that came the root of what caused all this. He has been unusually fortunate with his organs; the last to need replacing were his lungs twelve years ago, or so he has said. His face is about human but has the characteristic appearance of his spacefaring kin and is whiter than mine; it had no green discoloration from spacesuit breathing liquid. And, as with each of the Karsa who chosen to live among us, the question arises of what are his likely relations and connections with his people and government back home.

The next to my left was a total contradiction of a rule that SHADO had for many years followed automatically when sorting real from illusory sightings. He was named Tikanuwa on his ASC delegate card, but it was not his real name - it could not be, for the sounds of his language were quite unlike men's. All that transcribers could do was to name each of its basic sounds after a human type syllable to produce something typable. After decades of SHADO and many others automatically rejecting such sightings when sorting out real from delusional contacts, a Zeta Reticuli Grey was sitting beside me as live solid alien flesh; his party's spacecraft stood openly on a lawn outside after decades of being seen by men only as brief illusory images. My base's doctor and psychiatrist Dr.Jackson, who was with me, and down the years had treated several people with 'abducted and examined and returned' experiences and dismissed most of them as delusions, looked at him in total shock. Thankfully Tikanuwa was wearing a woven wire balaclava, to stop his brain's natural microwave communications from causing interference in the humans' brains. Karsa brains also do this at times, but not so much. I looked with another shiver at the hallucinatory-looking little being who was going unconcerned through papers, and looked round again.

Even the humans there were a miscellaneous lot. Some were space scientists. Two were asteroid miners' representatives, in an independent long-trip version of the AT (= Karsa alien-type) spacesuit with a built-in food synthesizer and an automatic sewage destructor. That was another topic for the meeting: some time was needed a law ordering spacemen who used such suits to stay suitless in gravity long enough often enough to stop them becoming spacesuit dependent or weightlessness dependent, conditions which Dr.Jackson had run into already. I remarked about this, and about a large unfamiliar grey metal box with alarming warning stickers in four Earth languages and Karsin which each of the two had on his back below his life-support pack.

"Spacesuit dependent or not, those two should have left those suits in the hard bunker!" said Sir Alexander Battersby, who had come in behind me. He had been a Minister and crucial in getting SHADO set up, until he lost his seat to Khlîvakaghd in that fateful election. "There's a complaint in my area about getting a road mended," he said, "and that meant seeing my councillor, he's yet another alien, that Dekhtumiqh from NDSP [North Derby Space Products], the sort of thing to expect round Derby since all that, and someone came to see him about space kit while I was there, and I overheard some of it. Aliens here, aliens there, and even road

signs in their language around that new spaceport by Mackworth: I'm not moving out of Derby just for them, and now real Greys here and those two other weird specimens. Anyway, I overheard then about those extra boxes, they're backpack-sized UFO-drives! New, just off NDSP's secret list."

"What now!? I well know how *they*'d blow up if something went wrong inside, after all the UFO's that my men have disposed of. Too many independent secret space kit research places, all these mini Area 51's. One agency saw in time that it was time to send squads round to clean those places out, 'picking the lilies' as they codenamed it, 'li' is Roman for '51', but they didn't use enough men, and it merely alerted the space kit places and made them wary and now they are much better guarded."

"If you need to know, when the USA started their atom bomb project, they divided south Nevada into numbered areas, and the area containing Groom Dry Lake happened to be 51. Later, someone wanting to test a new secret plane found that Groom Dry Lake was an ideal natural runway, and things went from there." I said.

"Yes, the Huancayo and Port Harcourt affairs." Battersby said, "And, like lilies, those places look impressive and flashy and have a dignified name but mostly serve to tie up land and work and produce little useful. The Iwani had it right before that new Karsa fleet went there and spoilt it. 'Li' also happens to be Chinese for "power", which is what people hope to get by running these space projects. Just coincidences. Crumbs what an assortment. For a start, what's the CRS [French riot police] doing here?"

"Oh, them. The one with the officer pips is Leblanc, the section-leader of their section 47, who got hold of some UTC's and went off space exploring. Trust even them to get in on the space act. A standard CRS section is 32 men. With their training they'd be good starting material for good hard efficient space patrolmen, if they don't turn into footloose space wanderers first. The other two are a young couple that they took off Tau Ceti III, for goodness sake, not aliens, they're descended from humans that Karsa took from Ireland a century or two AD. They don't talk Irish, but a language called Ivernian that on Earth died out in the 9th century AD. Since then Leblanc put them through his unit's training course: he doesn't hold with carrying noncombatants."

"I know, same as those three NASA men they gave a lift to; full CRS training and so much muscle put on that none of their clothes fitted when they got back, and it gave them a batoncharging mentality that doesn't really fit in where they work. And I take it that those two with the four hinged flaps instead of proper jaws and nose like that 'Predator' in the space movie, are Iwani, I read about them. The article said that, same as HR2822.III natives, they evolved from not fish but octopuses. Those four flaps and their arms and legs come from the eight tentacles. The foetus still develops a waterjet organ like the octopus did; in one in every 30 or so it doesn't die off in the womb as it should, it stays as a big heavy hump on his back, a burden on land, an all too handy baler pump when his mother's bathing him, but makes him good at swimming when he's bigger, a lot of their work frogmen have them."

Which I knew already: I also had a copy of the article. I went over to Commander Clive Ansberg, who I had met in the real Area 51, to tell him about the backpack UFO-propulsors. He swore, for he was developing the same thing in secret, for special commando enforcement squads only and very much not for general issue. I knew the effects of security-type kit or training in wrong hands; once on my way to somewhere else I saw ambulances tidying up after striking dockers had let strikebreakers in so far and then teargassed and batoncharged them against a wall in all too efficient riotsquad style and kit but not controlled by police rules about treatment of prisoners.

He was the chairman, and called the meeting to order. There was little point putting specific motions; most of what we could do was to start some sort of system to keep track of stray space groups, and all of it complicated by lack of a common language. The Tau Cetians had picked up French adequately, but not English. Leblanc's English was enough to buy things in shops but not enough for detailed discussions. The Iwani knew their own language and Karsin but not English. The Greys via much secret observation of Earth knew English but had to make its sounds with a synthesizer; two of them knew Karsin via mostly hostile dealings with raiding Karsa. Juan Fernandez from Huancayo in Peru knew his native Quechua language and Karsin and a little Spanish but no English. I know Karsin and French well. My pilot Len Carrington later managed the unusual feat of speaking the dominant Grey language unaided, but that was no help then. Earth autotranslator computer programs were still nowhere near fluent and accurate at speech speed. The chairman announced that some of the delegates would have to serve at the meal breaks, as no servers had been booked: where there are no servants, secrets can't be overheard and gossiped about by servants, and spies and public media reporters can't get in by pretending to be servants.

Discussion started, slowed by the need to wait while translaters caught up. It was soon clear that there was no easy return to a solid stand against the Karsa, as had been of old, after so many Earth men had learned space travel from them. And the first to speak was Khlîvakaghd, expressing support and thanks for the various Earth attempts to find other solutions to "certain chronic medical problems that my species suffers from".

A bit before, a SHADO and Area 51 fleet attacked and took out the main local Karsa base, which was at Proxima Centauri, not in our Solar System as some had guessed. The Karsa called it Khvînazgarikhk, "the place of 4 sections"; a section of UFO's is 10 or so. In the battle we found that a new commander Ekhkinighd had tried to restore the old order, trapping various humans and Earth-friendly Karsa who under his predecessor Pazdulaghg had habitually gone safely between there and Earth. The attack rescued eight of these, two Karsa and six humans, including Keghdin, a Karsa pilot-instructor at Huancayo, who had been enticed there by false promises; several other friendly Karsa on Earth at the time had refused the enticement and remained safe. Khlîvakaghd and Fernandez expressed thanks for this. Ekhkinighd and his men who were captured with him were still captive in the USA in adequate comfort.

The two Tau Cetians were unwilling to treat the Karsa as merely enemies. "You keep saying that those who land from space on our world in those spinning circular sky-ships and say that they are the gods, are not telling us truth." one of them said in hesitant French with a noticeable flavour of CRS barracks, "But, whether they are gods or not, they have often helped us. For instance, in one of our lands about 50 of our years ago much rain ruined the harvest and made hunger, and the leaf-shaped worm [= liver fluke] infected our sheep, and hill bandits that had their dens in the wilderness round the fire-mountain called Morrîgan's Forge demanded supplies as usual making bad worse, but the priests told the red suit sky-men next time they came, and in their flying ships which shoot the lightning they aided by us cleaned all the bandits out and took them away into the sky, and that was a great riddance." Morrîgan is an old Irish war goddess. They told us of other timely helpings. The Tau Cetians had no faster long-distance communication than foot or hoof or sail, or two sorts of native birds that they use pigeon fashion, and they knew of Karsa activity on their world that may have been metal mining or the like only by vague tales by a few far-travelling sea sailors. Their writing system is

like no Earthly system and seems to have been learned or copied from Karsa.

He continued: "We marvel that beyond hope we have ridden in the spinning flying ships in ship-clothes like theirs and visited in person the land of Iwerind far across the gulf of the stars, which you call Ireland, where those who you call the Karsa took our ancestors from, and the CRS brought us two back. We saw that the Goidel [= Gaels], as we thought would happen, had taken all the land and their language wiped ours out. And now the Goidel language is greatly changed and itself in peril, and it clings to the edges of the west of Iwerind and is driven back by a language that came from beyond the eastern sea. You say that that new language's ancestor first arose in the land far over sea to the northeast whose natives called it Skandana Auya [= Scandinavia] in their language when our ancestors lived in Iwerind."

"Languages change. We have been away long, if our priests have preserved the old tales aright." the Tau Cetian woman said, "It is hard to realize that Wlatobertakos, a Goidel war-leader who oppressed us until the flying ship men took us away, is the same name as your modern Flaherty, or that Temaris in the east of Iwerind where the priest-kings lived, that great hall that many tales tell of, is the same place as the empty site that you now call Tara."

Here Ansberg abruptly called discussion back to topic.

"As any airport flight controller could tell you, we need a way to get registered space flight plans quickly to other star systems, and warnings of trouble back to space patrol bases, faster than the flights, else there's no way to run such a control system properly. Right now the only thing faster long range than a spaceship is a faster spaceship, and too often those we want to track have the faster spaceship." a man from Area 51 said, also angry at the effort and secrecy spent developing backpack FTL drives only for him to see two asteroid miners sporting them.

"Then use subspace radio." someone said. Among the humans there was laughter and Star Trek type clowning until the chairman called for order.

Khlîvakaghd looked annoyed, for his species have no sense of humour or sarcasm, and treat it as literally true, or know that it is untrue and treat it as ordinary falsehood. "I suppose that you could try to develop the faster than light sensor system called Utronics that SHADO uses to detect my people's ships, into a communications system." he said, "I know that such a system exists in truth, as often my people's ships came in faster than light and found your short-range rocket craft called Interceptors well away from base ready to intercept them as if they had been warned."

"Utronics exists, I will tell at least that, since much of the Earth public knows that name already." I replied, "How it works is still a SHADO secret, and we intend to keep it so, as long as the Karsa have that dangerous new fleet of big warships of theirs. If we manage to develop it into a sort of radio like he said, if we find how to send a tight and powerful enough beam of it to send a message several light years, far enough at least to hop a message between relay stations, every ship and space base and spaceport would have to have a receiver and transmitter of it, and men who knew how to repair and service them, and that secrecy would not last long, and it would be expensive keeping up all those relay stations. If the Karsa have an equivalent system, I do not know of it."

"Subspace radioing can be done: we've done it." said one of the asteroid miners, knocking his chair down with his spacesuit's ominous bulky FTL pack as he stood up to speak, "Some of us were looking around Neptune, and one of us had a heart attack. We blipped our UFO's [= UTC, here] drive in Morse code as fast it could manage, and something near Earth heard it, and that gave at least two hours start on light-speed radio to get someone in a hospital away

from his lazy time-wasting procedural coffee to where we said we'd land. As we came in we radioed ordinary way about it, but the subspace had got through."

I remembered the incident, and the scavenging for a cover-up explanation to tell the patient and his mates. And his hard contempt at on-planet luxuries, with a cliche office image where it was not appropriate. So this was Man's historic first subspace radio message, a call for an ambulance made by abusing a spacecraft's motor, and full of old-type telegraphy abbreviations. This incident's details coming out at an official but not secrecy cleared meeting changed much, particularly if everybody and all sorts started using it, like when CB radio and then mobile phones found their way to Britain. Spacemen had guessed that we had 'some sort of FTL radar', and we had tried to spread disinformation treating that as a fringe belief; but now all in earshot knew that UFO-drives make Utronics type emissions. And Huancayo, Port Harcourt, Bitterfeld in Germany, Mo i Rana in Norway, etc etc all over the place, and of course the Karsa, now knew how UFO-drives work. I was not pleased at this leak. Particularly if imitators caused a succession of accidents from UFO-type drives so abused either fireballing, or breaking down leaving a crew stranded. Likewise earlier, those who laboured to perfect the Exocet anti-ship missile's navigation system were not pleased when some clever civilian in Falmouth in Cornwall came up with the same system and called it Lokata "for no better purpose than as a nav aid for #@\$& unnecessary weekend cabin cruiser sailors".

Clearly when the main meeting broke for coffee and snacks I was going to have to call those who were security-cleared into a hurried meeting in any reasonably soundproof room that could be found there. This was done, and the secret inner committee meeting was quorate with two to spare. It did not take long to decide. As many space labs as could be trusted would collaborate in trying to develop the Utronics into an FTL radio system. If subspace radio - the word crept persistently into use, overtaking attempts at choosing a codename or a set of initials - proved workable, we would have to meet again to choose who to allow it to, and whether to have the units sealed and only serviced in the secret labs, and whether to put a destruct device in each in case it went astray.

Another thing that arose was the duplicated backpack UFO-drive. If the inner meeting did not have power to order NDSP etc to keep them secret and not to be sold or told of, then bringing it to the main meeting to get the order issued would blow secrecy that they exist. If NDSP were indeed planning to sell them on the general market soon, we would have to act quickly or the attempt would have no purpose. Again I wished for a fully empowered ISAB (International Space Administration Board) with full power over all Earth space matters. This inner meeting closed. We bolted a few snacks and a glass of water each and rushed back to the main meeting as it resumed.

"I am now allowed to say that we *may* have real FTL radio some time. Meanwhile we still have to coordinate between the various species who have FTL travel. This is not helped by all the divisive nationalisms and regionalisms on Earth, and suspicions that some of these separate groups have made their own arrangements with the Karsa, including the fate of prisonfuls of hardened criminals." I said, punctuated by halts while translators caught up.

The Area 51 delegate said: "And, would the Iwani delegates say how much of their planet they speak for? While Straker was on their world that time, their old secret group of big nations that ran their Space Guard was obviously collapsing, like the mass excitement on Earth after the Arden landings but much worse. Later contacts have said that many of their local national groups have started their own space efforts, or rather have restarted them after their Space Guard stopped them long before." "You have our list of the Iwani national groups which we circulated before this meeting." one of the Iwani replied, in Karsin (which I am starting to think will end up as the general interstellar communication language, like English is on Earth, or Aramaic was for a long time in the ancient Middle East), "We two speak for one of our world's new international space project associations. General opinion on our world would not accept any arrangement that would risk the Space Guard returning. Far too many good first generation spacecraft sent up from our world have been summarily efficiently demolished crew and all by that secret, totally hard and efficient, unanswerable, unfindable, un-appealable-to group run by a league of a few of our big powers. The 'space shuttle' attempt by our Etenari nation, that Straker saw being destroyed by a Space Guard patroller when he found our world, was one of many such, and lost are the adventures and discoveries that their crews could have made. We will list and report all we can of stray travellers from off-system, but I fear that it would take much to make my planet's people agree to hard action against the Karsa who broke us out of our old stasis enforced by the Space Guard, whatever be the rumours of what the Karsa come for."

Khlîvakaghd, who for a while had seemed to be having an inner struggle, got up and spoke in his own Karsin language, which I can understand: "I am thankful to Earth for letting me set up here, and for ending the risk that Ekhkinighd brought to my kind who have settled here; but I am a Karsa, and I have some loyalty to my kin and their troubles and needs caused by the hereditary organ failures left by the mutating plagues that swept my world during what we call the Great Crash. That was when our old world order collapsed under shortages caused by ever-increasing population that nobody in power had had the courage to do anything effective about in time. But this I reveal: we have had for centuries what SHADO calls Utronics. As for whether we have developed a faster than light radio from it - that comes later."

We had heard of the Great Crash before. It started as a strike in a distribution depot, wanting rations increased. Often before, authority had staved it off by giving them what they wanted and slowly shrinking it back to normal; but this time they refused, as it would make other groups short, as after much uncontrolled population increase all supplies were now at ultimate stretch with no available slack anywhere at all. Attempts to break or bypass the strike spread it. Essentials could not get through, and production of many essentials was hindered. Unfed workmen could not do a day's work properly; often they took time off work to look for food; chains of command broke down as people giving or passing on orders did not know where their subordinates were. Men put their relatives first and the general interest second. The population size crashed in riots and shortages and collapsing supply systems and old and new diseases got loose as each group that could tried by force of weapons to take what it needed. Hereditary organ defect mutations had accumulated down the years as medical skill and more compassion than common sense let mutants breed; on top of that came the mutating plague: some say it escaped from a lab when a starving mob raided it to eat experimental animals and their fodder. Armed groups managed to defend scientific areas, and could only wait for everything to fall as far as it was going to and then pick up as many pieces as they could.

I have seen a few pictures brought back by returnees; a gazelle-like wild desert animal called the *akhten* wanders the mountainsides and the dry gullies looking for scarce vegetation and the *ighd* and the *kaghd* prey and breed undisturbed where ancient suburbs once spread. Soon afterwards the Karsa discovered FTL space flight, or learned it from others, and they say that one named Kazdinak was the first of them to reach another star system.

"As for whether any Karsa ships of Spinner type carry their form of Utronics -" I said, "when SHADO was set up, Karsa UFO's tracked down and attacked Westland Electronics where the Utronics was being made for us, as if they had detected it being tested. I feel it safe to reveal that, as we now have our Utronics made in another place, and so many of our doings are now public after what has happened."

Tikanuwa spoke. An assistant of his provided English and Karsin versions, which made less work for the translaters. All watched, for this was the first time a Grey had spoken openly to a meeting on Earth. What he said was not very much, but useful. His people had been surveilling in secret the comings and goings at many star systems around his homeworld, and had a list of them. This list was later useful to us. He continued: "But we are unwilling to release some of our technology used in this surveillance in case it gets to groups that may use it harmfully. We watch what we can to safeguard our own worlds; but we see no point in getting entangled in agreements with outsiders to be everybody's secret police further and further away when it is irrelevant to us. As others have said before, a world power without space flight can get to rule its world and leave nowhere unguarded, but the further a space power expands, the more frontier it has to guard, and is tempted to expand more to guard those frontiers, with no end."

The meeting set up routes to collect and report on spacecraft movements, and some start at setting up a system to list all known spacecraft before too many unknown spacecraft factories develop on remote planets. The Grey party wanted to visit the non-secret parts of Moonbase, and were allowed to. The meeting decided its next date and place, and finished. I went back to base.

As a Moonbase radar found the incoming Grey ship, John Eltham at the new silo site started to be afraid of everything. If he showed more strange mental faults, and even when important visitors from afar were around, Foster would have to use his powers as acting Moonbase commander to overrule Eltham's foreman and have Eltham grounded. The Greys came out of their spaceship. Foster suddenly looked at Eltham, then at the Greys. Their spacesuits had the same parts and colour patterns in the same places, but in Eltham's suit often necessarily bigger. He ordered Eltham into atmosphere, and made an excuse to get Tikanuwa to come in with him.

"Let me look inside your helmets." Foster said. Eltham obeyed at once. Tikanuwa was reluctant but obeyed. Foster overcame his shiver of unreality at first seeing a real Grey close up, and said, comparing them, "Lets see: audio receivers and speakers - breathing set connections - same in both - brain microwave receivers and transmitters - same in both!", and then to Eltham: "Where did you that spacesuit from!?".

"I and some of my mates visited a Grey space station near Zeta Ret.B.IV. We needed supplies. My air [-breathing] spacesuit kept acting odd, so I bought this one there. I paid in metals that I'd dug. From time to time one of them gets a sort of childhood giantism and ends up as big as an Earth man by the time he's adult, sometimes it runs in families; they're useful at work to handle heavy stuff, so they make special spacesuits for them."

"Built by Greys for a Grey to their long-tested proved design, and complete with brain microwave transceivers. No wonder you've been acting odd, a human in a Grey-type suit getting your head dosed with psychoactive microwave patterns every time some stray signal happened to be same frequency as your suit's radio to microwave receiver. No work for Jackson here. Just get that microwave junk in your helmet deactivated, or find its off switch, it may be fine and natural for Greys, but for humans it's a one-man brainwashing chamber. Apart from that, it's a very good suit. Grey spacesuits are air or oxygen breathing only, their ships' motors create an anti-G field so they've no need for personal anti-G gear such as liquid-breathing. This whole thing's yet another result of all sorts casually visiting all over the place."

"Oh, is *that* all it is!? I already knew that being close to several Greys without some sort of anti-microwave head cage can be like being brainwashed or 'on a bad trip', and now there's a new way of it happening. Pity any human who's stranded on their planet without one."

"Oh, and can I see your previous 'air suit'?".

"It's back away in my ship as a spare. It's like Red Bull's over there. Him with the rodeo painted all over his suit backpack."

"Oh, yet another asteroid miner's throw-together homemake, what we call a DD, that's 'Dumped stuff and Diver's breathing set' and variations thereof. I once even saw a man on Mars in a converted hardhat diving suit with a homemade backpack plugged into its helmet connections and much strapping-round added to prevent ballooning. Including even the weights: he said that gave him more weight to lean a power tool into the work with in low gravity. Space is an unforgiving place. I've said a long time it's time to put proper controls on who makes space kit - except we haven't got the men to stop all small-kit homemaking as well as doing what SHADO's supposed to be here for."

"Talking about suits," Eltham said, "we heard that NASA's giving up its ALBS suit project after all they've spent on it. So many of its men use those AT [= alien-type] suits like the Karsa's that Bitterfeld make that they've had to accept it, but they're trying to change the helmet so it's styled different. They'll still use 'astronaut type' suits when only air-breathing's needed."

The Greys flew away, and everybody went back to Moonbase routine. Space events were now so usual that other matters had been having first go at newspaper front pages, such as that a strange sudden wave of new species of insects and fungi and viruses with no effective natural enemy and resistant to many pesticides was devastating the South American coca bush, and a thankfulness that it looked like putting an end to the international illegal cocaine trade.

MONTEVIDEO

Back at West Harlington we had a conference. Spacecraft came and went openly outside; the time when films had been made there seemed like a memory of another age, and the characteristic whining whistle of a spinner was now too common to get much attention.

"Before the last meeting, yet another suspicious lot of redsuits came that we had to let come because a small third-world nation said they were expecting them." I said, "I say this time we go and look. Time we did something, among all the separate space efforts and contact groups. Once there was a solid secure military / industrial / business / political / secret agency tie-up that let us and similar secret bodies run their affairs smoothly."

"I know." Freeman said, "Nosy civilian police and suchlike were kept away from secret areas. We got all planning permissions through on the nod. When this place was being built, keeping this basement secret was a real right worry. One nosy building site safety inspector waving a warrant at the site security and getting on site and seeing the deep excavation and raising issue about it not being on the plans that the local council's planning office had, could have blown it; but we had all the connections to keep such pests away. It was easy to have all late-night drink and entertainments licences refused or stopped where they might have attracted late crowds to routes that we used to smuggle away in the small hours the many huge loads of earth dug out to make it. We had all the strings to hand to make a plausible story and security screen to hide incident sites. The correct men got put on crucial committees and councils, such as Johnson and Eckersley and Faulkner and Prees on Derby council. SHADO hardware was put on the front of queues at factories making it, and local unemployment in Derby was high enough to discourage industrial delays such as skilled men job-swopping to get more pay, and strikes over pay, and the like."

Keeping up such a backup among public officials is vital. I remember all too well when some electronics for Skydiver were delayed seven weeks and finally had to be helicopter snatched from behind a picket line, and the hateful shouts of "scab", and the thrown stones and the teargas, not knowing what they were hindering by causing delay over a petty quarrel over pay. SHADO has enough to do without having to stop bits of outside people's personal lives fouling things up. Of this Henderson now spoke.

"But since the Arden landings this set-up had been steadily unravelling." he said, "Since some of you are new, I'll explain. All that big public sensation loosened things, but it held at first. That crisis of all times was when it should have stayed solid and held tight, but Battersby went. Of all the bloody stupid times to hold a general election, among all that excitement and pro-alien sensation. I only found two days before election day what the Labour candidate was, what with being busy and believing Battersby's assurances. Down the years he was all well known for his assurances. He was fine as long as things went as planned, but when things started to get out of control he covered up and hid it and made assurances and hoped to get everything square again in the end instead of admitting what was happening. One link gone made several vulnerable, such as the crucial four that our set-up had on Derby city council, and they knew about SHADO. I'm an Army man and I say appointing men to public positions that responsible should be done by a responsible superior like in a properly run business or army or official department and not left to the rabble, and then we wouldn't have had this disaster." He went on to summarize events that I remember all too well.

The first omen of trouble was the Buckley's shop affair, a while before the recent unusual alien activity started. A Mr.Buckley in Derby bought a derelict corner shop and got it

profitable and a useful local facility. Then a council official put his rent up to match, leaving him with no reward for his work. He paid the old amount with a suggestion that the increase was an error by a clerk or a junior mamnager. Complaining to his councillor and his MP got nowhere. People protested. The matter escalated until "the usual methods" to recover the non-payment put three police and two bailiffs in hospital. All this at the wrong time just before local councillor elections. His ward's councillor was Faulkner. Officialdom backed off about the rent increase, but things stayed heated over this and other local matters, and an hour before nominations closed the Liberal man pulled out to give the Labour man a clear run. The Labour man, Abdulmalik, was a science fiction enthusiast and totally unsuitable to be allowed to know about SHADO and the alien threat, and I heard afterwards that a local election result had to be 'tweaked' to get Faulkner back in, and emotions stayed heated.

The four had so much to tie together, and much more so during 'all that', that people in their local election wards could never find them to complain to about local matters and letters to them from the public got only a standard reply from a secretary and false promises that matters would be raised at the council. Some local people complained that the four were "hard Tory types, only concerned with the efficient functioning of office-type business" and suchlike, but I will give no opinion on that sort of political accusation here.

Of course some of them complained to their MP about that, and as long as that meant Battersby, he merely said that messages were being passed on and such assurances to stop the boat from being rocked. Some talked of getting the four sacked as councillors for peristent non-attendance, but he found the best lawyer to persuade them that that was not an option, and matters went on smoothly.

Then came that all too well remembered general election. I suspect that the aliens had known it and had timed their first public landings accordingly. Battersby having to miss or skimp important meetings to go electioneering was quite enough nuisance for us at the time. He seemed safe, when he looked around at the other candidates: a few fringe characters; the Liberal man didn't threaten much; nor apparently did that pasty-faced Labour man from the space kit works in an overall with the unpronounceable name and the strange accent, and we trusted his assessment of the situation. But we all know what happened: Labour won. So next time that lot moaning about never finding their councillors went to their MP, he was that Khlîvakaghd Ekhkukhvâranib, and he saw a chance to start legal action to get them out with a lot of people supporting him. After all SHADO has fought for and against, as Henderson said, "I was reduced to having to spend half an hour with that Godforsaken alien trying to talk him into leaving the status quo alone and not disturbing things any further", but no good came of it.

Battersby threw everything he had into a desperate speech in the city council room to try to save the situation, all he could throw in about patriotism and tradition and so on. Some say he spoke more impressively than he ever did before. People saw the size of his sheaf of notes and wanted a chance to speak before it got too late, but he knew how to raise his voice over interruptions without breaking tone or rhythm. He tried to claim responsibility for the recent prosperity, that it had been "built on foundations which the city council and the local business community had already laid" and suchlike, but the audience did not believe that. People heckled and chanted. He tried to carry on. People rushed the platform and someone tried to unplug his microphone. People shouted about jobs and broken promises. He tried to repeat drowned-out matter and could not resist any more the temptation to answer back. He got flustered. Someone jarred his arm and his notes went underfoot. He started to go hoarse. By now his carefully rehearsed speech was in ruins. Someone 'pleaded his bladder' but went out to his car and came back with a guitar and sang a mocking and most un-called-for song to the tune of 'D'ye ken John Peel'.

I remember all too well calling at that meeting to find what had happened. I had been to Derby many times, but this time things were all wrong and different. In the low sun the ominous shadow of an alien transport ship standing among the factories fell long over the houses. Road signs were duplicated in alienese. Derby, which I knew well, had become strange. I had heard of such things as when NDSP, at first lacking local money, first paid its men in valuable metals that had been asteroid mined, and they went to the local jeweller / pawnbroker to cash them. Those who are careful with money don't hold with pawnbrokers, but this time it had to be done. Three armed alien guards went with them in case gangs or native officials caused trouble. Some of the men carried newspapers with the finance metals prices visible and prominently ringed in felt-tip. That caused more trouble, because a lot of the men knew little about the finance markets but thought in terms of each sort of item having one right price as if it was bread or a joint of beef or whatever like people buy every week in shops.

Even deciding where to hold the meeting had caused trouble. Their committee who organized rooms etc for meetings were left to it, but when we found that the meeting room they had booked was in that new hotel with the alienese name Keghânuzgarikhk on the corner by the road to the spaceport and well in earshot of it, and the name already spreading to a new suburb there, we had to re-book in a hurry. I got to the meeting, and instead of order and business well ahead I found chaos, shouting, the room full of uninvited people, Sir Battersby on his hands and knees under a table picking up his scattered papers, and someone singing to a guitar. This was the song:-

Do ye ken Battersby, smartest suit and tie? He assurances brought that he'd put things right for financiers, yes, and so none can deny; but we still had no jobs in the morning.

And now Battersby comes from where secrets lurk; (= chorus) he assurances brought, but the aliens brought work, and so now let him prove his assurances' worth at Keghânuzgarikhk in the morning.

Do ye ken Battersby?, who a plentiful load of his smart business-suited assurances told to whoever complained of no work on his road; but we still had no jobs in the morning.

And now Battersby comes from where secrets lurk; ...

As for Battersby's men oft by secrets bound: we had things to complain of our local ground. When we went them to meet they were never around, nothing ever was changed in the morning.

And now Battersby comes from where secrets lurk; ...

Finely spoke Battersby and his SHADOwy crew, Johnson and Faulkner and Eckersley too, also Prees; but it came when the counters were through, Khlîvakaghd had the seat in the morning.

And now Battersby comes from where secrets lurk; ...

Now for Khlîvakaghd my support is plain, for in town, and their base along Radbourne Lane, we've got plenty of jobs since the aliens came, where we go to our work in the morning.

And now Battersby comes from where secrets lurk; ...

Some say that that song helped the name Keghânuzgarikhk to spread from that hotel on the spaceport road corner to the area around. So also did a bus company using it as a name for a bus interchange. It all served to yet more popularize something which I had fought and fought against any risk of it becoming popular.

Henderson continued: "Prees afterwards sang this in reply to the same tune. Not proper procedure, but it was all he could do, that redsuit and his bunch turning a most important formal meeting into a bear garden:-

Do ye ken Khlîvakaghd in his suit so red? When we needed calm he more upset led, and the din of his pack could awaken the dead, sling four men from their jobs in the morning."

The meeting broke up in disorder, and the law case went ahead. SHADO sent the best lawyers to defend the four; no good. By then SHADO's name was public and unpopular. We tried to stall matters. 'Clive Ecky', as some call him, started a public rumpus, and the case had to go on, and we lost. We got someone to plead emergency and appoint four responsible new councillors and let electing wait till matters had simmered down. Two local tabloids mouthed off about the democratic process not being followed and thin ends of wedges and so on, and started yet another public row, and Khlîvakaghd saw his chance to ask his first question in Parliament and no good and matters were again hostage to the whims of an excited mass electorate. We had the four new men put up as candidates, but that meant SHADO's position there depended on such petty parish pump borough councillor election issues as bad street lights and inefficient dustmen and some local shops that were one by one closing down, and we got no good: by then NDSP had replaced the street lights and given the shops security gear and better public car access, and that alien Dekhtumiqh got Faulkner's seat, and local workman types got the other three, and our whole position there soon fell to pieces.

"We must pick up what pieces we can." I said, "This time we go after this lot and try to find what they're up to, and never mind some banana republic's tinpot army trying to arrest us or order us off."

I phoned Warton, flew there in one of the now familiar circular craft, collected 15 more there and a crew for each, and took off south. When we reached the sea we set off southwest at wave-skimming height. By now a tradition of space-navy training was being sorted out and we could handle risky situations, and our craft were well armed. Eventually we reached Montevideo, the capital and main port of Uruguay in South America. I know Spanish well, but not the native Tupí-Guaraní language spoken in some back areas. I had had little reason to specifically think of Uruguay before; about the only news from there that I remembered was a humanitarian-type row three years before when its city council, to stop the common nuisance of criminal street children hiding in the sewers, without warning fitted locks to all its manhole covers and fumigated the sewers; that solved one chronic petty crime nuisance - at a cost. As far as radar could tell, the two craft had not taken off again; as we went to the air force base where they had landed, I radioed that I was coming as a courtesy visit "as one space group to another".

We landed. I saw an underground security search and rescue squad (for so their badges said they were) checking drains and gullies. Such precautions are common and I took little notice of them. The two spacecraft, and several large police vehicles, were parked by a strong-walled building. The search squad came near and asked us to move a bit so they could get into a manhole. Freeman asked them about their lives, to find what he could; the search squad men seemed hard and efficient at their job in a rather overacted manner, but their memories of personal lives before they joined the squad seemed vague and generalized, and I felt that I had come across that sort of thing before somewhere.

Ramon Martinez, the base's commander, quickly called people and started a welcome meeting and introduced me. It went much as most formal meetings of space or airforce groups, until a local man made a demonstratory off-topic speech about a local grievance: "And in this time of cooperation between peoples across space, I presume that you will do your job as commander of SHADO and send away 'el guecar' which the aliens brought? It consumes all garbage and with it it has consumed many livelihoods of the poor, and when it is gone those people who used to get a living sorting usable matter and items from the garbage will be able to so again as has always been here."

I recognized an approximation to the Karsin alien language word *gekhkar* for an advanced destructor recycler device which they which they brought; Earth men often call it the EER. Italians call it 'il gheccare' and likewise are sometimes in two minds about it. Even so in 19th century England farm workers appealed against threshing machines, and handloom weavers appealed against mechanized spinning and weaving, and when ignored they took the law into their own hands. Still, I and my men had not come so far from our desks and posts and communication links only to listen to a routine moan about jobs being mechanized away. The meeting clearly needed jerking back to topic; Ramon replied:

"They know why that happened. They soiled their nest. They had a reasonable steady income collecting materials for recycling, but some of them did the usual and went after more: worn-out stuff tarted up and sold as 'nearly new', selling stolen and fake stuff, organized crime type threats against shops and traders who refused to buy the stuff, and then the shops had to stand the loss or dishonestly sell the stuff on. One workman that I know spent 37 weeks' savings on a television and then found that half its insides were missing. Surely the crime gangs got enough from drugs and sex and gambling!?, without starting such things as that nasty violent little racket in scavenged used batteries not sent to recover metals but repackaged and sold as new and 'the usual methods' to make shops buy them. For example, last year four men mending a sewer got lost because all their torch and two-way radio batteries were those duds and (as we found later) in the dark they slid down a chute into a fragmenter (that's a machine that catches and breaks up big objects that get down the sewer); we sent the underground search and rescue squad to find them and they ditto because ditto. God rest their souls and comfort those who had to clean up the mess. That underground search and rescue squad was

valuable, and losing it was a blow. After something like that, on top of other things, that lot know full bloody well why we banned hand picking of garbage here and use 'el guecar' instead. Is there any need to discuss this any more here?".

"Did you catch the culprits?" I asked, feeling a suspicion.

"Yes, easily, after asking many people." he said significantly. I remembered the two UFO's or UTC's parked by the police base and could tell that he was referring to alien-type interrogation techniques - paid for how? Perhaps merely in metals or other such supplies. I also wondered about the plagues attacking the coca bush, since we were on the same continent, and whether their origin was natural, or connected with recent space events. After the plagues had done their work, what will remain for the areas where it was grown? Only dead coca bushes standing in land so poisoned by cocaine from fallen coca leaves that no crop other than coca could grow there for many years after. Such is the end result of being a supply area for that trade, harm for the grower as for the user and for those who the user steals from, a trade that has killed and harmed far more people than the aliens ever have. Barring the very unexpected, cocaine as a bulk racketeering commodity has gone up the spout; and so likely soon will heroin, for, as I write to keep this record up to date, new plagues are destroying the opium poppy in Afghanistan and Burma, and they are spreading fast. If it turns out that alien genetical engineering experts helped to stop those drug trades by creating the new plagues, they would be so much thanked by so many people in authority that SHADO would get little help from the law-abiding public or the ordinary police against them, and I would not be able to trust all my men to obey orders to act against them. What the Karsa ultimately want has probably not changed much, but they know how to seem friendly, and I loathe addictive drug rackets as heartily as most right-thinking people; I felt alone in the dark.

Likewise where I was, the main losers seemed to be the poor that depended on crime and scavenging for a living, and any big local crime cleanup aided by alien interrogation techniques would be heartily thanked for by everyone in the area with property enough to tempt thieves, as is obvious to anyone who has seen such things as the high barbed wire perimeters and guarded gates round wealthy areas in Manila in the Philippines. I remembered hearing of the locking of the sewer manholes three years before. Back to the point. If what I suspected was happening, contacting the country's government would be far less likely to get help against threats from space than would have been before the Arden landings; any confrontation in the area would likely be the wealthy plus any aliens in the area against me and my men and the local poor, leaving me in a role even further from SHADO's remit than other events that I had got into.

But I decided to look at that police post, UFO's or not. I led five of my men up to the place after dark that evening. As I knew was likely there, something detected us, and guards came out at us. They were polite to us, and led us in, and started to 'wine and dine' us in the officers' bar; but as they hurried us along a corridor two of us overheard through an official room's door a human voice in Spanish-accented Karsin say to someone that the base was going to send a batch of something that taken literally made no sense in the circumstances and was obviously a codename.

I stuck to soft drinks only; after two drinks I and one of my men 'pleaded our bladders' and got into a corridor unescorted. We heard faintly a local voice in Spanish pleading desperately "I won't do it again.", and an angry reply: "We wanted some rewiring done at our place in town, but you'd stolen our usual electrician's tools and put him out of work just for money to buy a few cheap meals! That and a lot of other offences down the years!". Then

came another plea about poverty interrupted by the sound of a blow while another voice complained in Spanish: "No electric shock or being knocked about like I'd expected, I've learned to stand up to that. Only that funny gear round my head and that stuff squirted into me and I felt dizzy and out I spilled all that stuff ratting on everybody and I couldn't help it, and now I'll be in the shit with them as well when I get out ..." During my career, and in TV police fiction, I have heard my fill of routine criminals being interrogated, and I see no need to quote more of it here; police in South America are well known to heed 'judge's rules' less than in Britain. We had heard much of that sort of interrogation technique in recent months as a fearsomely efficient uncoverer of crime rackets and political undercover groups alike. Then a policeman saw us and pointedly told us where the toilet was. We went there and then back to the officers' bar; there was little that us six alone could do until we got back to our ships.

On our way out we passed some 'criminals caught' photographs on a wall. Some of their faces stuck in our minds for some reason as we passed them. Another notice was a list of known local street gang insignia: a coiled venomous snake showing its fangs, a jumping lion wearing a wartime German helmet, a death's head among motorcycle parts, and others; but I had more important matters to think about than the mentality of Montevideo teenage street gang members.

We got back to our ships. I was glad to have all my men with me again, with what I guessed was happening. "Oh boss," one of them told me, "they've offered us an evening in town, everything paid, ...", and listed a string of expensive entertainments.

"No. We stay sober and stay on board and sleep on board." I countered, "You aren't tourists but an action squad under orders, and I won't have them wining and dining you to get round you or to get you away from your ships." I heard men passing outside. It was the underground search squad shoving seven handcuffed and beaten captives along and stuffing them into a van. Some of us went out to check up on them.

"Scavengers or crooks or whatever, all that matters is they were in a sewer and they weren't sewermen. I'm ordered not to let the sewers be a hideout again." their squad leader said, although I had guessed some of that from the smell, "They gave us lip and offered us bits of money and info if we let them go, but we'll soon find that anyway." Another of them told more of the action, in a somewhat overacted hard efficient manner. And as before, their memories of their past before a year or so ago were vague and generalized. A noise led me to a destructor towed by a personnel carrier load of similar men marked 'airport security', which was grinding up a hundredweight of cameras and sound recorders which two of them tipped into it down a chute. "Reporters and nosy people." a squad leader explained. That at least I was tempted to sympathize with, as its first-stage breaker crushed a telephoto lens as big as a bazooka; in the old days secrecy not only of SHADO itself but of its film studio cover was at risk from public media spies with telephoto lenses trying to scoop new movies before their official release; too many film stars who acted with us told wearisome tales of press harassment causing endless lack of peace and privacy. I do not like Elvis Presley cultism, but some in SHADO say that at least his 'minders' had the right tactics with any cameras that were unauthorizedly clicked at him in passing. The body of efficient hard-marching trained thugs went away; I would not like to have been one of the arrested reporters forced to keep up with them at their pace.

Three of us realized where we had seen some of their faces before. They wore identical tough overalls with badges, identical helmets with the same badge on, and some of them wearing riotsquad gear over it. They had a hard dedication to orders and authority including

not trying to keep back from the destructor any items that would sell. This clashed so badly with faces that I knew from the photographs in the police station were those of arrested local criminals, that there was no doubt was happening there, not in some remote alien base but among humans and likely done by humans, and given away by not bothering to alter the faces by plastic surgery. They were reprocessees. Seven of the aliens captured with Ekhkinighd had proved to be reprocessed humans, and we identified them by DNA tests, but in no way had we ever managed to reawaken their human memories, and they remained loyal to the aliens; and the same would likely be true with these. In this case, those held responsible for loss of their underground search squad had been made to provide replacements for them.

So this is what came of that messianic event longed for by fringe cultists, the coming of the aliens. Not space travel for all. Not a paradise of wonder and plenty. Not even supermass abductions and devastation of the Earth. Not global panic and collapse of civilization. Merely this: More authoritarianism, given easier means to enforce it. Rubbish-scavenging poor mechanized out of a job and so becoming more recruits for the next troublemaker around. Crime detection by interrogation made far more efficient, thanked by mamy but causing suffering in some poor areas that depended on the proceeds of crime for a good part of their living. But at least, people claiming that they did not have missing items or the means to pay amounts owing could easily quickly have their truth checked. Mining of new minerals in something of a slump because of *gekhkars* recovering so much from old rubbish deposits. At least one mercy: alien-type interrogation machines looked like putting very many of the world's torturers and mistreaters out of work. Our 'suspected abductions' list was confused by many teenagers tired of unemployment or parent-rule who 'ran away to space' without telling anyone if they found a spacecraft landed. There was nothing else we could do there without starting a war; we took off and went home.

Life went on. The same mixture of allsorts came and went from Earth. By now some degree of coordinated traffic control had more or less developed in near space. I longed yet again for the old days when humans stayed near Earth and anything else could be shot on sight.

Christmas came. I refused to relax the standing order for loading base security to sling out all alcohol and tobacco from all personal luggage going to Moonbase. Some there made a row about this and called me Scrooge. I ordered each of them to write a report showing he understood the nuisance of air fouling by cancer-causing smoke in small enclosed spaces and the risk of incoming hostiles catching SHADO all hands drunk.

Four echoes without Utronics IFF's came in from the direction of Alpha Corvi, which was nearly antilunar at the time, and were tracked in as usual by various Utronics sensors. A computer-synthesized voice announced their track, but the voice was not SID's, never again after a UFO with new weapons had summarily demolished him in passing one day that we remember too well. Two of our new FTL-capable interceptors went after them.

"They're spinners and one big craft, like we thought. Still no radio IFF either." said Len Carrington in Interceptor 5, still remembering an all too long second and a half spacesuitless in space on That Day when SHADO's old stand was blown away, and being returned in an alien spacesuit in a propaganda show release in front of a huge crowd at Arden beside Loch Lomond. He wanted to fire at once before the aliens could, as of old, but that was no longer an option, with so many spinner type craft being used by humans. It would only take one Earth exo-geology team or the like to be evaporated along with their craft for the all too well

* * *

remembered public and academic anger against SHADO to start again. Thankfully, he now could keep up with UFO's instead of having to shoot first or lose the chance. Next, as often, he wished he could 'put his shields up', as was routine in the endless indoctrination of unreality in Star Trek and suchlike. He challenged them, and they stopped. John Harrison, who rode with him, went out and astern and got 'Red Rum' out: it was a Type 3A missile that his base workshop had converted into an armed man-rider. Someone came out of one of the spinners to meet him. He was in a 'Type 1' Karsa alien spacesuit, the sort with the chainlinking, with a big extra backpack, but when John got close an annoyed green-stained Earth-human face looked out of the faceplate.

The spaceman switched something on under his helmet chin and spoke. An ultrasound and microchip device of alien design that we call a SOAD (= speech organ attitude detector) decided what speech sounds to synthesize according to the current shape of his liquid-filled mouth and throat as he asked how long the delay would likely be. His awkward grammar and word usage showed that he was not from an English-speaking country and did not understand Harrison's reply about near-Earth space traffic rules. He said in the Karsin alien language, again a bit ungrammatical: "I order you to say how long you will hold us here: someone on planet waits for us. Or further methods."

At least that is the textbook translation of what he said. Harrison wondered who he had picked up Karsin from and where. Some other time would have been better for a grammar lesson explaining the difference between the interrogation interrogative and the ordinary interrogative before he offended someone important. Harrison explained to Len what had happened.

"Like someone called Jimmy that I heard of:" said Len, "he is English, and he had picked up Italian, which he spoke with such a strong Sicilian accent and Mafia mannerisms that five years ago some police wondered who he had learned Italian off, and that set them on a trail of investigation, and Jimmy had to learn Italian all over again quick before he went on holiday there."

"He's got one of *those*." said Harrison ominously, "That propulsor backpack of his is giving a small but genuine 'working UFO drive' reading."

During this, five spinners rose from Earth towards us, with a known asteroid miner firm's markings on, as if wondering what was going on and to find who was arriving. In the simple old days we would have known what was in any spinner craft that we saw and why they had come, and we would have shot them on sight while we had the advantage; not now. Six crew came out of them.

"That one in the two-tone green and blue suit with the funny animal painted on his backpack's got some strange kit over his face -" Len radioed, "no, crumbs, it *is* his face, he's an Iwani.", and then to the asteroid miners, "There's nothing to see here, move on."; but they backed away a few ship-lengths and still hung around. A loud gargling and a drains noise filled everybody's ears as someone left his suit radio microphone on while going into air-breathing mode.

Len relayed developments to me on Moonbase and asked me: "Request permission to arrest them 'or I fire', for disobeying a patrol order to move on. I'm sick of everything I do becoming a public thriller video."

"It'll take more to make them move right away than's worth it." I replied, "They're leaving, they've seen some arriving, of course they want any news of dangers etc from that other lot before they go out of radio range. We aren't Star Trek, ships can't scan or radio each other hundreds of light years away in a few minutes."

"I've heard of real subspace radio, of a sort and not very useful: Red Dog's lot managed it, to call Earth in a hurry that time when they had a man ill. I guessed all along that SHADO had some sort of FTL radar, as soon as 'all that' came out." said one of the asteroid miners.

"If we get to yet another good asteroid and geologists try to order us off it saying they're studying it, there'll be trouble some time." someone radioed.

During this a space-shuttle-shaped craft approached from somewhere away from Earth, and its pilot wanted to know when some other of the craft would be free for him to meet them. It wanted to dock with one of them, but the other craft were not pressurized. I began to think that I would never be able to check the four incoming craft without an audience. Two men came out of the space shuttle astride a missile-like man-rider and hung about waiting for me to finish, or trying to bother me into standing off while they did their business first.

The result was a started remark from Harrison: "Wheeyow. Straight out of my grandfather's old Buck Rogers comics. What now!?".

I had to look a few times before I could push my suddenly resurfacing film director mode back into its box and get back to space and work out that what I saw was working real in space and not a bad film prop. Their spacesuits were skintight; if I had seen them in a film I would have rejected them out of hand as repainted divers' wetsuits used as a bad attempt at saving money on props. Two big naked backpack cylinders were connected open-circuit to a spherical bubble helmet. The only other visible bit of kit was a sewage tank connected to his natural waste outlets. I asked him what he did when he got too hot or cold.

"The temperature control kit's under between the tanks."

"Then it can only help that part of your back. What about a circulating system in the suit to warm or cool the rest of you?".

"My body has its own circulating fluid system to carry heat about. I call it 'blood'." he said pointedly, "Now can we see these people before we run out of air?".

I didn't care much for that style of spacesuit, but I had too much to do to get into a discussion about it. "The Patrol is the Patrol, and an order to move on is an order to move on." I radioed to all concerned, and looked at a new echo on my base's Utronics display. Alarms sounded and a voice "Object, about 200 miles long, SOL 400 ..." Pilots scrambled, but the object never became visible to light sight and the echo disappeared as it came to distance zero. "Forget it. It's another 'troll'." I announced tiredly. We had had a quantity of them recently. When two radars in earshot of each other have the same frequency and also pulse rates the same or in a simple rational fraction ratio, as should not be allowed to happen, ghost echoes are to be expected. I ordered base staff to run the signal through a computer to find which of our Utronics stations was the culprit, but none were found. The asteroid miners backed a little further away. The Buck Rogers types on their missile dodged behind me while I was busy, tethered to one of the five outgoing spinners, and pulled their missile's bow end in with them as they went in. Len was telling the incomers that they could not come without either an IFF each or someone to prove their bona fides, when he received a relayed message from someone on the ground who was expecting them.

Len sighed, let them pass, told SHADO where they were due to land, and wished for a really strong supernational Space Guard like the Iwani used to have, and a political status letting SHADO or its successor be absolute master of deciding who to let land and never mind every small and medium nation wanting to get into the space scene. I had seen the mess that the new big Karsa ships had made when they broke into the Iwani home system and ended its

long isolation, like when Commodore Peary's 'black ships' sailed into Yedo (now Tokyo) Bay in Japan in the 19th century but more destructively; I was thankful that three more big Earth warcraft of the 'Kaminski type' (named after an Interceptor pilot who died in action) were nearly ready. Once spinner-type craft were the symbol of alienness and only a few knew that they were real, and none on Earth knew how to fly more than a few million miles from Earth; now they were routine sights. But instead, the new Karsa fleet of big craft now guarded the distances between our world and theirs, and only from a few returnees, and one lucky unmanned probe which SHADO built around a damaged but working FTL drive from a crashed UFO a while before the Arden landings, did we know anything at all about their world. The Buck Rogers types came out and flew back to their ship, and I wondered what had been inside their missile on their outward trip.

The incomers landed near Rennes in Brittany in France. When my men got there and watched through telescopes from a patch of laurel scrub, the crew of some of the ships proved to be the old enemy, Karsa, after organs - from a large pig farm that they landed beside, whose stock was a breed genetically engineered for human tissue type genes and human-type longevity, although we did not know how the farmer got hold of a breeding stock of them. Vertebrae crunched as the aliens cored out intact spinal cords - at other times in other spinner landings in the past it would not have been animals. The big craft, whose crew was mostly humans, was offloading metals into a barn for the farmer to sell on the side. So much for an anticlimax, and between them passed nothing more hostile than a moan that spinal cord removal was still fracturing a few neural arches so spoiling a few of the chops: a petty distasteful moan for those of us who had seen or heard of the effect on their more usual previous source of spare parts; but from what we overheard the third side of that trade triangle seemed to be that the aliens kept some asteroid miners provided with ships and kit. If so, this was yet another sign that the aliens now had much better access to energy and materials than had been soon after the public contacts started. As the ships took off, two more impossibly large FTL objects appeared on Moonbase's Utronics screens, but not for long enough for us to find the cause. The other spinners, which had been hanging about in geostationary, went away. I wondered again why asteroid miners often in these recent weeks seemed to know of patrol and other spacecraft movements in and near the Solar System almost before we did.

TAU CETI

"Some time we must look at Tau Ceti, now the three new big ships are ready." General Henderson said a few weeks later at a committee meeting, "It's time we knew more of what's going on there than what we've got from those two uneducated pre-industrial peasants who that bunch of CRS brought back and they think all modern technology is magic. The aliens could be getting minerals and all sorts of supplies there and a base only 11.75 light years from here in return for currying favour and those two wouldn't know. And before that, whoever's best at learning languages quick'll have to learn Tau Ceti Ivernian, unless when we get there we can contact and trust one of the native priests who know Karsin. And just how many stray colonies *are* there of exiled humans across space being tended like livestock, helped when in difficulties same as a farmer helps cattle or sheep, including controlling their numbers, and for a similar reason?".

"Two of my base staff have learned it in their spare time already." I said, "And it'll give us a good chance to test the new improved Utronics."

A week later I led three big craft from the same dry plain in Nevada as I had led a fleet from twice before: not the new three but three older craft (Leila Carlin, Kaminski, Turton) which I knew; they had been refitted recently. On the ground nearby, a guard called John Anderson and a secret area clerk called Susan Kempsford planned quietly to marry during a week's leave that was due soon: more came of that, and they had their reasons not to let base command know before.

My spinners were in onboard hangars and not flying loose. A year or two ago, having a working spinner was my ultimate daydream; now it was routine. We took off at night and went far north away from the ecliptic. Again the eternal stars crusted a black sky, until recently remote beyond reach, but not now. I looked for the constellation of Cetus, used to represent a sea monster in the Perseus legend, and found Tau. On a planet near that faraway dot are exiled humans, and now I had the means of going there. As we turned towards Cetus, Leila Carlin's onboard Utronics detected a fast 'troll' as big as the asteroid Ceres, but it vanished without trace as usual. The journey went unremarkably, and many of Earth's constellations stayed recognizable. Tau Ceti is a little brighter and whiter than the Sun, and its planetary system is much like ours, including thousands of asteroids that an alien base could be hidden among. We observed its other planets as we could in passing, and got to Tau Ceti III. It has no moons. A few orbits showed three continents nearly the size of Asia, icy polar seas, forests and steppes and deserts, and in its biggest ocean a line of islands along a geotectonic convergence zone and two Hawaii-like trails of volcanic and then coral islands downstream from hot-spots. A large bomb-burst of islands showed where a mantle upwelling had likely started suddenly about 20 million years ago in the middle of another continent and broken it up. Such geotectonic speculations came second to finding any human or other settlements. 'Scanning for life signs' is not an easy option in the real world, but after three and a half orbits someone in Turton spotted cleared patches which looked artificial, in a north temperate region backed by mountains on its east and south and facing west onto an ocean. I ordered four of my small craft to go down and investigate.

Back in Nevada, unknown to me, a superior officer heard of what Anderson and Kempsford were planning. He dug up an excuse to cancel their leave and post them on to separate places, disliking romances between staff and their emotional and reproductive end-results as a threat to efficiency; he at least was ready to combat the tendency for valuable young female office staff routinely exposed to secret matter to 'be in and out like planes at an airport' after the time and cost of training and security-checking each one. Also, Area 51 was no place to have to provide married quarters, paying and security checking the school teachers that would have to be brought in in years to come, etc etc. Hearing of this caused ill feeling among other base personnel, who were tired of secrecy restrictions on their personal lives. And news of what I was doing leaked despite all precautions via base clerks' coffee-time chatter into Ekhkinighd and his men's prisoner compound.

My craft came in to land. That mission's leader was Peter Carlin, glad for a break from endless near-Earth patrolling. Over a thousand years of axes had cut the alien forest back a long way. Carlin landed near a village with thatched roofs and walls made of hard clay beaten onto plaited wickerwork, what some call 'wattle and daub'. A large building of squared stone with baked-clay roof tiles was likely a temple; an end wall with gable was carved with a mixture of god mythology and spacesuited aliens and spinner craft, and again I realized just what SHADO had been trying to guard Earth against. Sheep and cattle and goats and horses grazed in fields; their ancestors had likely been carried across the light years either as frozen embryos or the same way as the humans. As my craft flew over, the natives looked up at them, and many went into attitudes denoting respect of some sort, rather than showing alarm. They landed, and again Earth men in red spacesuits with light grey helmets and green-stained faces walked onto a world beyond space, a thing un-looked-for and unintended when I helped to found SHADO. From here I quote from Carlin's report.

"As we came out, to my embarassment and alarm the natives gave us what was clearly honour due to gods. My crewman Peter Oving, who had learned the language of the two that those space-roaming CRS had brought back, soon recognized the natives' language as the same, and could understand and translate it. Except for two words preserved by a early Irish writer, that language, called Ivernian, was last heard on Earth in Ireland over a thousand years ago, still unwritten when driven under by Gaelic, for parchment making did not come to Ireland in time, and it was far too far from Egypt to import blank papyrus routinely; recovering their language was a first-class linguistic sensation. 'No, please!, we are men like you.' Oving explained frantically before they asked us to do miracles and turned on us when we had to disappoint them, but it was too late to stop someone from showing us to a sty with a large pregnant sow in it, with a plea that its womb contained his family's means of surviving the next winter. Its familiar grunting and smell were a somewhat jolting contrast to our means of transport and the alien vegetation in a copse behind the temple, and the distorted constellations that we had seen from orbit when on the night side of the planet.

'Lucky Straker thought to bring me and that doctor. He thought we'd get this.' said Colin Fletcher, a vet, 'This must be the furthest farm call I've been on. AT [= alien-type] spacesuits, flying saucers, and at the end of it, a dirty pigsty and ordinary Swine Erysipelas. OK, I've got an injection for it.'.

'Where do you get the iron for your tools?' Oving asked the sow's owner in Ivernian, and explained to me in English what he was doing.

'From the Red Mountain. It is far to the northeast, 20 days with a good horse, and many more at laden packhorse speed. It is made of a sort of stone that is burnt with coal to make iron. The men there have a skill which we do not'.

'Who are they?'.

'People like us. Not like the sky-gods who come in sky-ships like yours.'.

'Where does that coal come from?'.

'They make it from wood like we do here.'.

He meant charcoal. To pre-industrial peasants, old-style metalworking often looks like magic, but so far we were nowhere nearer the aliens. If that sort of thing was all that happened there, it would have been easy for us and too petty to need describing at length here; but it was not. A man in ornamented linen robes came out of the temple and addressed us in Karsa alienese, asking us who and what from the area we wanted to take away with us.

'They are not gods, they are men. One of them said so himself.' said someone, 'And their faces are those of men. And the gods never open their helmets; these have. This has happened before. They say that away east near Morrîgan's Forge some sky-ships landed and their crews' ship-clothes were not red but dark blue, and their helmets were dark blue with two yellow lines round, and they opened their helmets, and their faces were those of men, and they spoke among themselves a strange language that did not sound like that of the gods.'.

'The gods help us but enforce their rules.' said another, an old man who seemed to be the area's record-keeper, 'It is said that once a man found how to make thunder that could break rocks apart. It needed the yellow burning stone [= sulphur] that is dug at [the volcanic fumarole area called] Hell's Chimneys in the mountains to the east, but the rest of the secret is lost. The gods found out, and asked many questions, and their devices made sure they got true answers, and they took 23 people away with them. Another time, it is said, but I do not ask you to believe it, a man found from someone else how to make a water that burns cold [= strong acid], and then he used it to make a thunder, but it ended the same way. Since then thunder has been for the gods only, as was in the beginning. The gods can make thunder in a metal tube so that it throws a small piece of metal so fast that it slays like an arrow but far further away, and they can shoot lightning. Blessed be the gods.'.

He meant explosives. Here Oving's Christian upbringing could stand such talk no longer. He spoke out in Ivernian: 'We are not gods. Those in red ship-clothes with paler faces than ours are not gods either; they call themselves the Karsa. The gods may well exist, Lug and Morrîgan and the rest, and they live for ever; but the Karsa are not them and can be slain like us or you. We and you came from one world in the sky; the Karsa come from another world in the sky and had sky-ships long before we did. The Karsa brought you from Iwerind, which is a big island on our world. They come for supplies and people. On our world they did not help anyone, but they raided our world like pirates for supplies and people for centuries until we made air-ships and sky-ships, not as good as theirs but we could fight back. We formed a sky-navy called SHADO which destroyed many of their sky-ships, until at last they started helping people to get friends on our world. During that we at last found how to make far-flying sky-ships like theirs and go out across the sky-sea and find what they had been up to in other places. If you want to trade with them, that is your right, as long as you do not sell human lives to them; but the Karsa are not gods. Nor are we.'.

We spoke to only one village, of course, and the rest of the Tau Cetian people knew nothing of these events. People muttered. The priest looked alarmed and ran into his temple. We then detected a radio signal coming from the temple, although before that we had seen no signs of powered technology there except a watermill. Something seemed to be warning us of danger. Oving made an excuse, and we got back into our ships and took off back to Turton."

As the away mission returned, my big ships' Utronics suddenly recorded several big signals from that system's asteroid belt. Seven big echoes came at us fast. When they got near, we saw Karsa markings on them. They were the same as had smashed the Iwani Space Guard at 27 Orionis. They were far bigger than spinners, and in the old days one of them could have

demolished SHADO, craft and Moonbase and headquarters and all, in a few minutes plus the time it took to get in shot of each target. We backed low over the planet, over a big area of high mountains and huge jungle-lined gorges somewhat like the mountains between Assam and South China on Earth. My big craft had a chance of hiding in the geography, or we could evacuate as many as we could in our spinners and hole up in side gorges and jungle and in lakes until the enemy left, ourselves being hunted aliens far from home. Or we could resist, and all too likely 'fight there and fall in a far country'; at least we would take what we could of them with us, so they might think otherwise next time. Our computers coordinated and chose code numbers E1 to E7 for the enemy craft.

While we were manoeuvring, a Utronics man in Leila Carlin muttered "Now what's *those* coming, on top of those seven? - that size! - oh help, we don't need 'trolls' cluttering the image up *now*!, hiding real stuff. I say they're likely some bloody new control program bug that's started to show up."

"They're not 'trolls': wrong shape and much too diffuse." another said.

"They're still just interference, forget the %\$@& and see if we can duck round that big mountain with the cylindrical top and catch one of the swine in the side as it comes past, if they come right in after us." I ordered.

On Earth, as I found later, there had been another confrontation. Anderson and Kempsford, angered by a fire of love stronger than their commanders' orders, did not go to their new postings, but defiantly went to their booked place in Los Angeles and married. They were traced, and military police insensitively tried to arrest the two at the reception, the bride still in white and the cake being cut up and handed round. Many of the guests were men from Anderson's unit, who had helped to pay for the event, and they were angry, and they resisted. The end result of this affair disrupted matters in Anderson's unit. Work that was normally done by guards had to be done by some alien prisoners who were listed as what in prison language are called 'trusties'. Four of them were sweeping a corridor floor near an entrance; they suddenly reversed their brooms and with their handles hit two guards on the backs of their necks below their helmets and over their kidneys, took their guns and keys, shot four more guards and took their guns and keys, unlocked the main prisoner compound, and started a general rising. The aliens all got out of their compound to a guardhouse armoury and a kit store and shot them open with nine seconds to spare. Now well armed and carrying many spacesuits, they shot their way past workmen and guards, taking some of them hostage, and got to three parked spinners and an FTL bulk prisoner transport called IPT3, the one that they had been brought there in from their base at Proxima Centauri where they had been captured.

Its controls were such a close copy of spinner controls that they could fly it easily; as they rose towards space and freedom as many suited up as they had deep-space spacesuits for and the rest had to travel in a breathing liquid tank. Some put on human-type spacesuits filled with oxygen gas which they had taken; that let them help to fight off any initial attempts to stop the craft, but for FTL they would have to go in the breathing liquid tank. They got away antilunar, but their craft was slower than a combat craft and could be overtaken. Two of my new warcraft, on trials around Venus, went after it, lost it behind a stray near-Earth asteroid, found a Utronics echo the right size, chased and caught it, but found in it only mining machinery and some annoyed asteroid miners. Their foreman was an alien and the rest human, but it was still clear that the hounds had switched foxes; eventually the correct echo was found again and the hunt was on, confused by several more 'trolls'.

The pursuers sent a spinner, of a type made at Bitterfeld in Germany for speed rather than

shooting, to Tau Ceti to tell me urgently what had happened, and yet again wished that subspace radio could be real. It - and two more - found my fleet and theirs manoeuvring about among peaks of the planet and firing the first ranging shots. It radioed its message as soon as it could and hid in a lake that seemed to have been dammed by an old landslide. Enemy ship E6 backed away and left, towards the left foot of a distorted version of the constellation of Bootes the Herdsman. As seen there, the familiar sky figure had an extra 3rd-magnitude star - Earth's Sun. Diffuse big objects again cluttered the Utronics screens. The wolves of the outer wilderness had cornered me far from home, and a new arrival was bringing bad news.

"Incoming message from the Karsa fleet. Someone in it wants to speak to you in person." came a radio message from Leila Carlin's second in command.

"If it's an order to surrender, tell him no." I said, "I'll tell him nothing, and none of my organs'll end up in any alien's body. Stand by to ram on my order, if a Lucifer doesn't do the job. At least I'll make sure that ugly big thing that looks like Battlestar Galactica won't see its home base again, even if I and this ship don't either. It all came not having budget for enough more Interceptors to stop that landing at that place Arden and those students designing new kit for them, and bang went their old stasis of standard spinners and nothing else."

"That one's E2. If they come here often, they'll know the geography better than we do." said Carlin as we dropped into a large river gorge, "We thought the aliens were down to the dregs of the dregs of their resources, but now they've got this bloody lot. They took my sister Leila and cut her up for spare parts, and I say they're still at it. They've likeliest set up away from home somewhere with plenty of energy and metals. Same as some geologists reckon that that destructive volcano Vesuvius in Italy would have died a long time BC along with the Alban Hills volcano and the rest, but its magma chamber found a lot of limestone and started dissolving it, so it acted like flux in a blast furnace and made a lot of carbon dioxide for fresh eruption propellant gas, and that rejuvenated it. I can only hope that that colony of theirs, wherever it is, gets so self-reliant that trouble starts between it and its homeworld. When thieves fall out, then honest men may come into their own."

"Each ready a Lucifer." I ordered. A Lucifer is a missile with a high-powered unstable UFO-drive as propulsor and then warhead, expensive but effective. The message spinner came after us, and Kaminski found a chance to scoop it up into its onboard hangar. I did not see where the other two new spinners had gone, but I could all too well guess which side they had taken their message to. We went round the high jagged peak as close as we could. E2 changed plans and looped round, for its crew knew the area. A plasma blast from E4 evaporated tall old mountainside forest, revealing part of my ship all too obvious black against forest and rock as I came round. If that fleet reached Earth, they could routinely abduct far more than a few at a time. In the attack on 27 Orionis III a big Karsa armed salvager craft with an onboard metals separator had dived into atmosphere and opened its bow doors and swallowed a full native suborbital airliner, crushing the raised tail down and dropping the bitten-off wings as a hunting bat drops a moth's wings; it flew away, digesting the airliner and stowing the 437 abductees in its breathing liquid tank. Among the mountains we had to watch where the sun was, for we and they made obvious shadows on the ground. A few missiles flew. Soon they would trap us and obliterate us.

If only I had as many big ships: if only Earth's economy was as tightly ruled as the aliens', so a lot of the industrial effort wasted on making unnecessary private cars and luxury convenience machinery and hotels and finance business and holiday facilities of every sort had gone into making space defence craft in time. Things are not as easy as in the old days, when

riding and coach horses requisitioned from the rich could be sent straight to the cavalry or the horse-towed artillery. The ghost echoes started again, and started to get more definite. At least I could count out E6 as an immediate danger to myself; but I guessed darkly where it had gone and why.

Back in my home system, Ekhkinighd and his best available pilot sat at the controls of the hijacked prisoner transport, on their way home. Their spacesuits were their familiar type but had enemy Earth writing and Area 51 insignia on; it couldn't be helped. He saw a cluster of craft who had gathered near an asteroid for some indefinite purpose, and dived into it. Perhaps they had a slight guilty conscience, or perhaps they merely disliked officialdom and being inspected; the cluster fissioned like a californium atom when a neutron comes in. Some of the scattering ships had IFF's working, some, including now Ekhkinighd's, did not. Of the two pursuing patrollers, one finally close-hauled an echo that turned out to be a large tug-type spinner towing a cut piece of iron asteroid with a lot of platinum metals in; another found that its quarry was a foundry craft. The fox had spoilt its scent by running through sheep, and it was some minutes before one of the two found the correct Utronics echo again; it went FTL before they could reach it. Nearly 0.09 of a light year away towards Gamma Virginis they got near it at last, and so did E6, and it was ready for action.

Far away at Tau Ceti we were in a worse trap. The planet population was human but small, pre-industrial, friendly to the Karsa, and had no supplies that spacecraft might need, and like many such peoples thought the sky was a sea with an upper surface that gods sailed on like the visible sea. The 'ghosts' quickly shrank and solidified into eleven large ships, a different shape from the six, and with markings in a different alien writing system. One of their crew radioed warnings in Karsin in an awkward accent as if his speech organs were designed to make very different sounds. We overheard a radio confrontation between the two sorts of ships. The Karsa backed off. Only in the last year had we finally known that the new arrivals and their ships were real: the Greys had saved us.

Alan Delaville, captain of Kaminski, called for Len Carrington, who was under him as a shuttle pilot, to a radio to coordinate. Len switched it to transmit and made a series of rapid chitterings and squeaks: he is one of the few humans who have learned to speak the dominant Grey language without artificial aid. He was explaining to the Greys what had happened there when another message craft came and told us what was happening with the prison-break. I took a microphone and told the Karsa fleet directly in their language: "We will let Ekhkinighd and his men go home if you start proper discussions with us and let Earth men go to your world freely and all return safely. And you must return the ship and the humans and the spacesuits that they took with them when they escaped. Many of your people have got into important positions on my world, utterly against my wishes, but still you keep your world secret. As you see, Earth no longer stands alone. I don't know yet what's happening on your other borders, but we can find in time, and I suspect we will find other allies there."

"Including us, it seems that it must be." said the Grey voice again, "They have been patrolling our system and stopping other people's ships from reaching us, until we made these new ships underground out of sight and suddenly deployed them and made their blockaders go away. Luckily there is something in our brains that stops their interrogation gear from working properly on us, when they try to get our technology."

"I am Kazdehâgh, fleet commander here." said a Karsa voice, "You two lots can leave this system safely, and must, and stay away, and that is my only concession. I am ordered to patrol this system and keep outsiders out of it, or arrest them if possible. Before you lot came, two other lots had already poked about risking stirring things up, ever since you got interstellar travel, which neither we, nor the Greys from what I know of them, wanted to happen."

"There are Earth people of Earth descent here, and I am entitled to defend them and check on how they are treated." I answered in his language, "Same as you kept taking people off Earth to cut them up for organs or reprocess them into UFO-crewmen or the like, until SHADO made it costly for you. We don't raid your world for stuff."

"Because you don't need to yet." said Kazdehâgh, "You go on about rights and saving all lives, but what will come of it? Will your generation's rulers be famed as saviours of very many? Or will they be known as those who tried too hard to save too many, and so lost a lot? It happened on our world before, and the remains of huge cities stretch up *khvâranigh* [= steep bare slopes] and along dry valleys, and only ghosts and wild animals live there. On your world there are memorials for big killings that have been, and no organ of anyone killed in them was used, but all wasted; but that is little compared to what will happen in Egypt if it doesn't rain hard and long and soon in the Nile headwaters area. Too late to act when no water has flowed past Khartoum for months. Too late to regret that utterly pointless war in south Sudan and the holdup it caused in building the Jonglei Canal to get the Nile's water past all those waterwasting marshes called the Sudd. What will you do when the disaster comes? Will you ever summon to a Nuremburg Trial the peoples of in and around Uganda, or at least their rulers, for breeding and increasing without control?, so they stripped the Nile headwaters area trying to feed ever more of themselves and their livestock and cooking fires, until the area became so light coloured as seen from space that the rains stopped coming and the area became a desert. If the rains do come again, much water will have to expend itself refilling the Equatorial Lakes to their outflow levels before Sudan and Egypt get any of it. The Romans caused the diaspora of the Jews, and now nearly 2000 years later some of them came home, and it caused war and trouble. Will your generation see the diaspora of the Egyptians, all hundred million of them? Will their 'exiles be in-gathered' to their ancient land before 2000 more years have passed? Too late when their river Nile is no longer 'Hapi', their ancient river-god, but in my language 'Kaghepeg' and in theirs 'al Wadi al Akbar', "the biggest dry gully"!".

Clearly much knowledge about Earth's present and past had found its way to the aliens during the recent contacts, and likely a lot of it via some of them helping to fly food into the affected areas to try to curry favour. "My world's people are not *akhtens* or desert hares to be thinned out with gun or poison when they get too many!" I replied, knowing by then something about his world's desert biology, "And if you want a fight to try to make us leave you can have one. But it will make sense for all of us to get together and agree to stop this wasteful arms race. First it was spinners versus Interceptors, then big craft, and now bigger craft. Some time common-sense must have a chance."

"Those Karsa who are on Earth are now deserters. When Pazdulaghg was sacked and replaced, all permissions that he had issued became void and everything that he let happen by default and slackness became an offence." Kazdehâgh replied, "Letting outsiders on our homeworld will need permission from the top. Let one of my message craft and one of yours go together and tell your fleet that Ekhkinighd and his men can come here, and we can sort it out here."

"Oh, sorrybut hands tied yet again." I said irritatedly, "In that case those prisoners stay here till this matter's sorted out."

One of my spinners and one of theirs left. Seeing them go, I wondered what had come from reaching that ultimate goal, getting a working spinner and copying it. Only a space arms

race, totally against the spirit of Gagarin and Armstrong and the other spacemen that Earth's public were allowed to know of before the Arden landings. Time passed. We all stayed geostationary, and Tau Ceti gradually went to the local west. We were in atmosphere. Directional microphones picked up native animals chattering and crooning, and for a time two big unidentifieds roaring at other mixed with blows and a fearsome noise of bush branches being vandalized as a demonstration of strength over territory or mating rights or some such matter that was everything to the two but not to other animals that they inconvenienced, but everything in a different sense to any bird that may have had a nest of eggs or young on the attacked branches. Finally five new Utronics echoes coming from the direction of Earth's Sun became Ekhkinighd's stolen prisoner transport, and E6, and all three of my new warcraft. The two spinners followed them flying loose.

The new arrivals got close. Everybody was tense and ready. At Navarino off the west coast of Greece in the Greek War of Independence it only took one rifle shot by one Turk to turn a confrontation into armageddon and stop Egypt's naval ambitions for ever and free Greece, and similar could happen here. IPT3 went towards the Karsa fleet. My three new ships tried to block it, but E6 blocked them. It got in line with one end of E2, and I thought little of it, but suddenly E2 opened a hatch and shot out some big capture arms that untelescoped to as long as itself and swallowed IPT3. If I had blinked I would have missed it. Ekhkinighd and his men were back with their people, and none on Earth saw IPT3 again. After an age of great shortage of metals, in their new time of plenty they are still unwilling to part with any if they can avoid it.

"That trick doesn't end the agreement." I radioed, "We have 14 ships to your 7 here. Some time this arms race must stop, and we are determined to make you stop going round taking people and supplies. Item one: Earth access to Tau Ceti III's natives, since you lot took their ancestors off Earth, and you've clearly systematically stopped them developing to modern technology at a natural rate. Item two: diplomatic relations including letting us visit your world, since there are so many of your people around ours."

"I'll report back what's happened and see what they say." Kazdehâgh growled, "It seems we can't stop you lot keep sniffing round, teaming up with those creepy little creatures whose ships can hide themselves in open space."

In the end, all parties watched each other for a time and backed away. "I'd need more than I've got here to take their base out." I said, "They'll have been visiting here for a thousand years, plenty of time to dig out an iron asteroid into a very strong base, even a Lucifer wouldn't blast it open, we could only hope it'd weld or distort the door shut and seal them in."

"Like that place Queen's Garage or however they say it, near Proxima Centauri, that time." said one of my men, "That was a rough do, and after all that, those bloody politicians should be sent for organs, calling us off so the aliens just walked back in and they say now it's several times stronger than before."

"Khvînazgarikhk. I was going to rename it Proxima-A." I replied, "And it or something like it's been seen in different places recently: I bet they've put a drive in it. And now we've lost all the prisoners we took there. Next time at the Committee I'll have another go at getting them to let us have bases in other star systems, but I don't suppose they will, and the usual accountant language."

"Not much chance of stopping him, that great thing turning up just as we did. In the old days it was spinners and nothing else and no public after us. Those asteroid miners scattering like scared pigeons like that instead of helping us, next lot of asteroid miners we come across, I

say search them thoroughly. And I don't like the idea of a place as strong and well armed as that Proxima base but FTL mobile, and the world's nations' treasuries won't like having to pay for us to make one of our own to keep the balance."

The Karsa presumably went back to a local base, but not while we were in range to see where it was. We and the Greys each went our way. We got back to the Solar System without further incident. We got to the asteroid where the ships had scattered before; they or a similar lot were back. More 'trolls' cluttered our Utronics screens, and some of us were starting to treat them as weather, an unavoidable nuisance to be put up with. The asteroid miners protested, but for once we were not going to be put off from checking all identities and kit. There were 17 of them. New fast automatic DNA-testing equipment quickly matched three of them with my ship's copy of SHADO's copy of an international missing persons list.

"Joseph and Stephen Paulsen, 15 and 16, vanished Droitwich near Birmingham UK, wanted for questioning money jewellery and videorec, property of their parents, that vanished when they did. Michael Abberley, 43, vanished on business trip near Blackburn Lancs UK. The rest aren't on the list. They're all human."

"We're not going back home or back to Earth." said Joseph, "We got part-time jobs to get some money of our own at last, our dad took it all every week, he wouldn't believe that was all we were getting, I even bought a Bible to swear on to prove it and he still didn't believe us, he never believes us, so we jacked the jobs in, so he said no more food till we get jobs again and give him all the money, he spends it all on himself, it went on drink and smoke and I bet some was to a woman he was seeing on the side, so we ran away. You can't pin the stuff on us, I bet he sold it and blamed us so Mum wouldn't nag him about it."

"Perhaps. And Joseph Paulsen, you're still legally a minor, you're still under your parents' authority unless a court changes it. Time was when SHADO had an official list of who should be in space and anything else was shot on sight".

"I know. We all are. We work @%\$ hard at it, which you patrol types don't, and our dad didn't either, bits and pieces of jobs and out of work a lot, mum said it was his fault. And guess who dug the metal that your fancy ships and their guns are made of. And, wrong, we're still under *our firm*'s authority unless etc." Stephen replied, who had over time had heard many strange-sounding orders and information from authority and had got tired of trying to understand them.

"I meant an m.i.n.o.r., that's a legal Latin word for 'child'." I said, not liking being misunderstood and 'schoolmastered'.

"Like we all are, like I said, except we ain't children, unless you mean miners are so thickheaded that we ain't allowed to have our own opinions. The Big Cheese himself of Shado interrogates us, and he says things like that."

"Forget it. Forget it." Len Carrington cut in, trying to back me out of a semantic tangle with a workman type whose spelling was not the best, for his family's solicitor had had the same with the word "minor" in a courtroom in a coalmining area, "Scrub the last two things he said. Forget them. Start again. At 15 you're still legally a child."

"Only for three and a part more months." said Joseph, "I'm not going back to *him*, I'll just run away again and find some more spacemen landed. If you take us back to Earth, me and by brother still won't stay at home. And you can't take these [space]suits for anything you say we owe, they ain't ours, they're the firm's. That jewellery likely means Mum's stuff, it was cheap partly-gilt brass and 'paste', we're sick of his inflated claims for compensation and costs."

"Or find the wrong sort of spaceman, and end up as organs or mind-wiped."

"You don't still believe that, do you?, unless you get on the wrong side of the law on the ground in some parts of the world, or so they say." he said.

I saw no point in starting yet another losing battle against pro-alien popular feelings that were a total non-fit with the amount of people that I had seen, or read secret reports of, messily broken up for spare parts in UFO incidents before the Arden landings happened. The aliens have been all too cunning keeping popular sympathy. SHADO is not a social services, and I wasn't going to waste any more of its time trying to bring home two ordinary human teenage runaways in AT spacesuits decorated with pop group and football club symbols, and said so.

Michael Abberley said "I was on business at an address on the moorland edge of Blackburn in Lancashire UK, and I woke in a spacesuit in a spaceship."; that was a more serious matter.

"Some of their kit's patent infringements made somewhere remote." one of my men interrupted.

"Forget it, whenever we try to prosecute for that sort of thing, they plead 'emergency repair or replacement to save life'." I replied. We found no backpack FTL drives that time. But a large handheld device like a bazooka caught his attention. He ventured to operate it.

"Owwwch my screen - what's who doing with a Utronics so close!?, the set's tripped out from overload." Len Carrington protested inside my ship.

My man overheard that, realized, and brought the device to me. "Look at this. It's a troll, I think. Now we know what they look like."

"Erh? How can that be a troll!? Utronics screen trolls are anything up to as big as [the asteroid] Pallas or Ceres." said someone.

"It ain't alien-made, it's too rough, it'll be some asteroid miner home-make. It's a bloody bootleg Utronics! They invented it again as likely as secrecy leak. Once they knew spinner drives make some sort of FTL emissions, that cat that Foster let out of the bag just for one civilian with a heart attack, this could have happened. All sorts using these things as radar and as radio, no proper control over who uses what frequency and pulse rate: no wonder we get screen trolls from interference. That's the end of *that* secrecy. And someone got a message FTL from here to Tau Ceti faster than a spinner, else E6 wouldn't have known to come to meet IPT3. The charge is possessing a transmitter of an unlicenced type, patent infringement and this time they can't claim emergency need to repair, making interference which jams navigation and tracking equipment, and anything else we can dig up. I suppose that 'SSPR' scrawled on it's 'subspace radio', that Star Trek word. Oh no, the prospect of every wild bunch of asteroid miners with Utronics used as FTL radio and backpack FTL drives, and some abduct from Earth to get new men."

"Calling E6 in needn't be their fault. IPT3 had Utronics."

"Designed to be used as radar, not as radio. And that plasma beam gun can't be mining or surveying gear. Right. Take details of everybody, full warnings and charges, they must follow us to our base or we fire, and find where those subspace things are being made!" I ordered.

"But we haven't done anything, only digging ore quietly." one of them said.

"Except aiding the enemy by causing a lot of interference. Except giving everybody communications as good as ours so we lose the drop on criminals and anarchy starts. That thing's obviously a crude first-generation thing making harmonics and sideblow all over the place and needed a year more development. An important suspect that we were chasing recently got away because of what we now know was interference from these things. Just like

some backstreet workshops are, get it on the market as fast as possible and never mind safety."

"If we didn't keep in touch with each other and make our own stuff, the metals buyers'd charge all sorts of money for stuff and pay us next to nothing for our metals, they say 'cash flow' and 'maintaining profitability' and that sort of business report lavatory flushings. Ordinary radio takes ages from this far out. And we need the gun in case anyone tries to jump us. Some places those aliens are getting awkward about us looking round. From the direction we tracked you in, you've been to Tau Ceti, right? We got ordered off by aliens there. Their own world's 400 light year away the other way, or is all space their turf? They even used to say Earth was their turf, till SHADO made it too hot for them."

"That's just the sort of thing that we say also, and you aren't helping us to do something about it. Right, we're impounding that so-called subspace radio and the gun, and you can go, and pass it on that we won't be as lenient with the next lot. Except for the culprits for the abduction case."

"Salesmen." said one of the asteroid miners, "Poshed-up city gits. 'Im and another were going the rounds 'commission only' bullying people to sell stuff and they chose the wrong bloody address, we were there down [= on planet] getting our [space]suits off for a while."

"And a drug-dart or something and the law taken into your own hands. The charge is still abduction. Some people in old times in seaports did that by doping drink, they called it shanghaiing."

"Never mind, leave it, I'll stay with this lot." said the abductee, "At least they got me away from that bloody boss of mine, 'ardly ever gave me an evening and never a weekend to myself, business and conferences and meetings for ever, once I was expected to find [stomach] room for three business dinners in a row same evening with different clients and toasts with them and still to be sober at the end of it, no chance for social life so I never had a chance to find a wife till I went with this lot, I had to pretend to have flu to get even Christmas off once."

"You said 'him and another'. Where's the other?" I asked.

"I'm 'im." said another of the group, "I'm staying with this lot also. I 'eard our boss passed our work onto three other of his men till 'e could get more men, they couldn't do the extra and said so, so 20-minute formal reprimand and it went on their records for arguing back, their first trip after was a conference in California, so 'as well be hanged for a sheep as for a lamb' they flit the hotel and took 3 weeks holiday letting clients down, their first holiday in 7 years at least, boss's firm went bust 'cos of it, good riddance to the swine."

"You mean that you want no action taking?" I said.

"That's it. We'll stay with this lot. Forget it. Let them be."

We got back to Moonbase unremarkably, but felt undefinably shut-in, knowing that Utronics was no longer secret, and that for some time uncontrolled asteroid miner types and their various species of alien friends had had FTL radio when no Earth official body did. Our lab examined the bootleg handheld Utronics set and found it was alarmingly powerful and effective. Will we manage to clean up all illicit sets of it and all copies of its plans and all who know how to make it in the vastness of the Solar System and wherever else they have got to? Or will we have to develop and sell to all and sundry a better and interference-free version of the 'Utradio' (as Freeman named it) and allow everybody six months' amnesty to hand in the old model?

I also phoned an address on Earth via a radio link and asked about some men that a previous space patrol had arrested and landed for trial.

"Oh yes, them, evading customs duties when landing asteroid metals, they landed in the

Ruhr in Germany, allegedly to get supplies and see relatives but they traded metals to a factory, you stopped them several million miles out on the way away afterwards. They were let off and they're back in space."

"What!?" I asked sharply, "I thought we and the committees had got that sorted out and agreed properly at last, space isn't part of any Earth nation's land or air, but it's separate, import duties must be paid on anything landed."

"Not that. Acquitted due to lack of evidence."

"What do you mean!? I sent the arresting patrol's report in with them, ten copies of it all signed by its leader, it was full and clear."

"They pleaded not guilty, that meant calling the arresting officer as a witness and he didn't come."

"My man's report was clear and full enough. SHADO have ground men to go to court to present that sort of report. I've said this before. I won't have my men casually ordered off patrol to court and they've got to be ferried millions of miles back to all sorts of places on Earth wrecking my patrol rotas and often a ship's got to make a special journey with them. They're not street cops with a beat only a few miles from the courtroom. That report was properly made out, full, accurate, authentic, and should have been accepted as authoritative full evidence and no contradicting it."

"Customs on the ground know the offence was committed. but without your man's evidence the court wouldn't accept that the defendants were the same men. Space doesn't stop the right for the defendant or his lawyer to cross-examine the arresting officer or any other prosecution witness."

"You mean, to interrogate him like a criminal. I've heard too much of these thirddegreeings by slick city lawyers, accusing him of lying and hallucinating and allsorts, sly ways to trick him into contradicting himself. That sort of city slicker needs a spell in the Army. As far as I'm concerned, my space patrolmen's reports should be accepted as they stand and not picked to pieces arguing about small details of wording and not flung out unread because space patrolmen belong on space patrol and not ground-tripping to courtrooms. Then subpoenas start arriving at my headquarters ordering such a man to be at such a trial, then ordering my base staff to reveal where he is even though they aren't allowed to say because it's secret, etc etc."

"Yes, and the next thing you want'll be for any patrol ship captain to be allowed to act as judge and jury and prosecution on the spot no appeal drumhead like under martial law. They won't like that on the ground."

"Yes, it is. They'll have to accept it. Space isn't Earth. Earth isn't space. Space meeds a proper enforced command structure for all and getting things done while everybody's there and none of this inefficient arguing and discussion procedure and bringing up side matters and patrolmen having to waste time going to Earth as court witnesses. It all came from all these separate FTL flight centres that started, and aliens landing all over the place. If they'd have sent in enough men to clean out the Huancayo and Port Harcourt sites properly, that'd likely have scared the rest into putting themselves under SHADO command properly and staying so. Instead, all sorts get into space uncontrolled, and two 'Clive Redsuits' have got into the UK Parliament. What can I do when the Committee needs a UK MP that knows about space matters, and the UK Parliament more often than not sends Akhkakhvandek?".
TO THE ALIEN HOMEWORLD

Life went on. Stray remote expeditions found worlds with many strange sorts of life, including more than one inhabited by what at first the explorers thought were robots, but turned out to be animals whose skins had evolved to secrete metallic iron. On one, something like a jet fighter swooped low and snatched a man up and flew away with him in its hold, digesting him and converting his body substance into flight fuel. Hearing of this, I wondered briefly how evolution had ever managed to come up with a Whipple-type jet motor, and then realized that again Man had run into someone's long-ago ambitious genetical engineering experiment which had been dumped there and let breed. A supposed alien living on a housing estate in Evesham in England proved to be a human albino whose hobby was astronomy, since albinos' eyes dazzle easily in bright light. Foster took Len Carrington and some others to Zeta Reticuli to exchange news and policy, for the size of the alien fleet at the confrontation had both new allies worried, but we had no more news of new big alien craft for a while. We could not stop stray contacts, and they still came for organs, often (but I suspect not always) from suitable animals, as at the anticlimactic recent Rennes incident.

While I was at Jodrell Bank in Cheshire coordinating matters, during a meal break I went to the nearby cattle market at Chelford, where during conversation someone wondered if I would give my opinion on a matter that had arisen in the area.

"I'm in an association of local village sport and social clubs, we wanted an emblem for each club; some didn't submit one before the deadline, so someone chose emblems for them, and now some of the clubs want them changing." he said.

"Lets look at them" I said, "I see many of them are 'canting', that means heraldic puns: i suppose the hazel twig growing out of a barrel is 'hazel in tun' is Haslington, and the field under snow is Winterley; they look suitable for a rural area; Sherlock Holmes's head 'll be [the town called] Holmes Chapel; what's the dumper loaded with sand supposed to mean?".

"Sand-ba(t)ch."

"Wherever does a car wheelclamp come into it? No wonder they complained."

"That's a village called Wheelock south of Sandbach. The two blue lines are the Trent and Mersey Canal and the Zan Brook."

From previous journeys to Jodrell Bank I knew the place, and the vicious little hill over a bridge by the Zan Lane junction that becomes dangerous when the road ices up. There have been some memorable lorry slides in winter at the Zan Bridge. Thankfully Wheelock now has a bypass.

"I suppose that badge with Dan Dare's head is Daresbury [east of Runcorn]."

"Yes, and it'll give even more people ideas that the science lab there is a space lab, which it isn't. Whoever drew Dan Dare in that 1960's comic didn't know much about spacesuits: no trace of a backpack; all his oxygen storage and life support gear is in the helmet, which would make it far too heavy; no idea that in weightless vacuum a spacesuit doesn't hang in folds like an overall or a film prop spacesuit does in air on Earth. At least space stories before the Comics Code routinely drew big oxygen cylinders on spacemen's backs."

"And no idea how to stop the ballooning nuisance pushing the arms and legs out straight. some of the oldest space comics got it most sensible: buck rogers comic style skintight spacesuits are practical, I've seen space workmen in them, no ballooning effect."

I gave what opinion I could about the club emblems, but I had too much to do to spend more time on that matter. I got back to Jodrell Bank. Among a display of local children's space art, a series of computer-generated pictures showing Armstrong and Aldrin flying a conventional nasa space shuttle to Zeta Reticuli and back, was decidedly less practical and an omen of likely future popular error as the remoter past gradually gets telescoped in people's memories.

We had to realize that Utronics had irretrievably escaped, like radar and frogman-type diving had at the end of the 1939-1945 war; a new official version of the 'Utradio' came out, and interference caused by the old type gradually got less.

It did not rain in the Nile headwaters area, and Kazdehâgh's words came back to me. Plenty and too much water ran in and out of Lake Tanganyika; up to five million years ago that water would have kept Egypt going somewhat, but now the gorilla forests and piled old lava and ash of the Virunga Volcanoes stood high above its buried ancient northward route to the Albert Nile, and Egypt still dried up. Seven UFO's landed on a garden in the university at Erlangen in Bavaria in Germany, allegedly to contact some scientists; most of the crew were Karsa, but three of them said they were three of the Arden students and left their names and posted some letters, but flew away with the rest of the crew. A computer in Moonbase announced "incoming objects" for the infinitieth time: it was a returning party of astronomers. Word came via stray contacts that the alien top command were in two minds about where the recent arms race was leading, and finally that they were willing to allow one visit.

I went to Arden and assembled six spinners and three crew for each, and set off. The ships spun up and no longer rested on the Earth, and I wondered if they ever would again. The sensor station on Shantron Hill dropped below us as the land shrank to a map below us. We broke out of a dull overcast roof into blue which rapidly darkened except a ring round the horizon. Earth changed from a world below us to a sky object. We went south away from the ecliptic and then towards a point between Corvus and Crater and Virgo. Those with binoculars or very sharp eyes and knowing which faint dot out of thousands it was, could see the star of the system that was the origin of all this: HR4918. At last we were on the way there. Foster had been there, well before the Arden landings changed everything, abducted by an alien salvager craft which at risk got in during a bad solar flare and scooped his Interceptor up; only by luck and slack alien security had he managed to team up with two other captive humans, a physicist called Dinkler and a surgeon called Shaffer; they managed to steal a one-man UFO each and return. A few other humans had been there and had been returned, in Pazdulaghg's time, but had not been allowed to see much. We had flown in space before, but this was different. We were going to the heart of darkness, the enemy capital, the end of the one-way road for so many down the ages from Earth and from other worlds. The now familiar near-Earth space was behind us, and the Sun was fast shrinking to an ordinary extra star between the two trails of stars in Pisces, and before us was the realm of the aliens.

Our six little craft, copied in Mo i Rana in Norway in its deep valley from the long-tried alien design, carried us on and on, and every time we went sub-light to look round the Earth sky constellation pattern was more distorted until it was gone. Some of the stars in Virgo the Virgin and Corvus the Crow became spectacularly bright as we passed them. As Spica (Alpha Virginis) dropped astern, we felt that we had crossed a barrier. Again I wished that matters could be simple like in the old days, when we defended Earth close and destroyed on sight any alien and alien-type craft, and I stayed in my headquarters and did not have to career about in the beyond in a liquid-breathing spacesuit in a spinner looking like the enemy.

Any trouble would only happen when we got there, unless there was a chance meeting. Tight patrolling or scanning of millions of cubic light years of space is utterly impracticable. As we were passing Beta Corvi our navigation sensors reported 'troll', and we investigated, but the offending Utronics emissions came from a large black hole - we keep well away from them! In FTL most of what we can detect to navigate by comes from space distortions from heavy dense objects, rather than from hot luminous objects. We flew on into the alien vastness, from which few humans had returned, and fewer by their own choice. HR4918 got ever nearer. Twice a moving signal showed an FTL spacecraft passing, but this was not the area for Earth craft to check on them. Here we were among the brighter stars of Corvus and Crater; some human space-farers later would call this space area 'The Crow's Belly', with all the old reputation of crows as portents of doom, where as men travel on they each day come ever deeper into the ancient central guarded realm of the Karsa.

Now we were near enough for their routine near-space FTL patrols to find us, but we were not stopped. We dropped out of FTL at last. We saw one star and a usual sort of planetary system; its Earth-equivalent had two moons and looked dry with one small sea. As Foster had seen, the larger moon had several large squarish maria, or scars of extensive mining. We had arrived.

We whiplash slowed round that moon. Much of its surface no longer had a close pattern of small craters, a record of ages of bombardment by asteroids and comets, but had been processed and reprocessed for metals; a patrol and scanner moonbase could have been hidden anywhere among so many remains of old mine-work. Some of us had joked about running foul of an alien-run 'SHEDO', where 'E' means 'Earthman', but such jokes, and caricatures and cartoons of such a body drawn by guess in informal newsletters circulating within SHADO bases and latterly among the public, now fell flat, for we were seeing the reality. There even Greys cannot safely go, as shown all too well by a Karsa body that we recovered once containing as transplants four small kidneys and three small livers. Three big circular craft came out at us, and four that looked all too much like my early Interceptors. But from them came no shot, only a radioed order in Karsin and broken English for us to follow them.

"We know who you are. We acknowledge what Kazdehâgh told you at the system that you call Tau Ceti. We will let you visit and return, this time." one of them said. We followed them down. Once in 'the old days' someone found a working UFO-drive in a wreck, but it was too unstable to keep long or poke about inside it, so we built an FTL probe around it, and it followed a UFO home and returned with pictures, which now proved to be correct. We kept out of the planet's shadow and came down over an endless series of barren mountains with dry valleys between, and what looked like two geologically recent meteor craters. Roads and railways threaded through this lot. Large uniform dark areas were probably solar panelling. A little vegetation was scattered along some valley bottoms. Most food-growing areas seemed to be under cover to conserve water. There were buildings and bases here and there. We recognised some of the geography from what Dinkler had told us. This time it was day as we came over their capital. It was as Foster had seen. There were the two white towers joined by two conduits in an open space surrounded by an oval wall of high building. There was the oblong open space where Foster in an alien spacesuit had stepped in wonder and fear onto the alien homeworld, with little hope that he would see Earth again. We and they landed at one end of another oblong open space.

We got out. By then we knew that aliens who breathed Earth atmosphere longer than a few minutes seemed to be poisoned by it because a secret sealed unit in their spacesuits dosed them with a combination of medications designed to stop them from deserting and going over to some Earth government and taking FTL space travel knowledge with them. After the Arden

public contacts one of Khlîvakaghd's men found how to defuse this system, and he and many others remain unaffected by Earth air after breathing it long-term. Anyway, unlike Foster before, our suits did not have this unit and we at once blew our lungs empty and opened our faceplates and breathed the air. It smelt a bit strange but did not poison us. It was very quiet. No bird sang and no insect buzzed. A tired sort of breeze blew a few small bits of stuff about. There were assorted storage tanks and raised structures on the roofs. The sun (for so many spacemen name the parent star of whatever planet they are on) was well over to the west.

"Here I and a few of my men are at last." I thought, "If matters had gone as they should have, if I had captured a UFO and copied it without the aliens and everybody else knowing about it. I would be here at the head of an army putting a stop to this lot and then seeing how nature took its course when they can't steal organs any more, and not in silly polite diplomatic stuff while they likely keep on abducting. Here they come, and judging by what Foster said, that one's some sort of local boss, somewhat greenish yellow jacket showing the green more in shadow, with a green collar, 'the colours swear like cats' as my wife said once about wearing crimson with scarlet, and no more styling of cut than a workman's overall, same as that head of department called Robart that Foster got away from." Through a door I saw a bin for waste for the recycler-destructor; in such a bin Shaffer once found among general waste and dissecting scrap the breathing liquid sodden remains of a \$700 Armani business suit cut off an Earth abductee who was then reprocessed into a UFO crewman because he proved to be very fit; papers in a pocket of it showed who he was, and so we later found from Shaffer the truth about an underworld figure disappearance which back on Earth had been blamed here and there and caused a big gang war. I wondered if Robart or someone like him in a building like this was the last thing that Leila Carlin or Regan's wife saw.

He led us in. The transport tunnels' linings were colour coded by destination. We wondered about the risk of treachery, but I saw little point in them interrogating us, as nearly everything about SHADO had become public knowledge during 'all that'. People in variously coloured uniforms and overalls passed us in corridors and roads, with some distinctive badges but no ornamentation; we did not get enough look at them to see if any were human. We were led to a room with chairs round a table.

We could not easily hope for much more than some sort of agreement to stop a wasteful arms race, but that was something. Organs inevitably got mentioned; recently developing suitable sources of animal organs were welcome to both of us; evidence such as I had came across in Montevideo was less welcome to me.

"You talk of everybody's freedom, and saving all, and that everybody has the right to live, but where is it leading you?" said one of them, "Your moral codes look like leading to a massive disaster sooner or later, unless your people suddenly become far more sensible about breeding, or you bring compulsory birth control in. It was the same among us, and after all our efforts trying to feed ever more people through ever severer shortages and allow them all possible human rights, the system suddenly collapsed and our population crashed to a twentieth in six years. We call that *Khavgashteg*, the Great Crash. Most of us alive now are descended from those who in that time collected and held onto enough supplies for themselves regardless. With that sort of scar on our history, we are in no good place to say yes or no to any population control policy at all. Some other peoples that we know have had the same, to varying amounts."

"Why you unfeeling ... you say it just *collapsed*, as if all those lives mattered no more than say bad scaffolding when a gale comes. Surely the time, a bit more effort and

self-sacrifice, people going without their little habit comforts that they don't really need after all, and you could have pulled through and saved everybody?" Carrington asked.

"We did, over and over again." the alien said, "and after each time they kept breeding and next time the job was even harder. To use an Earth analogy: if you keep sneaking a bit more load onto a cart, and hope the horse'll gradually get used to it, the time comes when the horse can't take any more load however much you urge it on and whip it on and plead with it, even if many people's lives depend on it, and it tries to pull and can't, or it refuses, or it goes down and can't get up, and none of the load gets carried even if you do realise too late that you should have taken part of the load off regardless of whatever."

"We're talking about people's lives, not some carter's load." I said.

"Same rule, and it still ended up bad." he said, "It came on gradually. More and more cases of supply depot workmen and such not getting through their work quota in the day, boss said they can't go home till the job's done, they said they can't do all that work on the food they're getting and they needed rations increasing. Each time it was harder to make things keep running, until that bunch at Kaldinzgarikhk went on strike, and the rest you likely know by now."

"Dinkler told me about that affair at Tekhkinak, that's a place by your sea." Foster said, "That was after the strike started, but things took a long time to collapse completely. Just at that time when every bit of food mattered, a huge store of food was destroyed because workmen skimped a repair to get time to go AWOL to look for food, so there was a bad fuel gas leak, and there was a big explosion and fire because the leak couldn't be stopped in time because the place's emergency breathing sets were missing because some bunch had stolen them and the gear to refill them - to go scuba diving! That sort of attitude's why on Earth also some say that diving's work, diving gear's work kit, people shouldn't muck about with it for fun."

"It wasn't like that. Food was getting shorter and shorter. The culprits got tired of seeing their children going hungry, so they took the breathing sets home to dive for shellfish to add to their rations. Didn't last long: the shellfish were less than they expected and slow breeders and once used up didn't come back for a long time, but by then the harm was done. And the breathing sets soon corroded inside and were no use, they were designed for industrial use, not salt water. The sea patrol finally caught them and summarily firing-squadded the lot, still in the wetsuits which they had made from misappropriated industrial rubber sheet, for poaching and sabotage and unauthorized use of boat fuel, but that didn't bring the food back, and matters slid down to the Great Crash."

"And in all the tight controls on water, I suppose they didn't have enough fresh water to hose them down routinely after use as sea divers are taught to on Earth. It happens. All too often in a crisis, self and relatives and immediate needs come first, the general interest and the future second."

"Same as on your world, about a thousand years BC, we were watching your world then and we have records of it: what set off what you call the 'Sea Peoples' war in the Middle East: over-use of the land and deforestation caused a drought famine in what is now Turkey. Egypt sent famine relief, but they couldn't keep it up with ships and farming as they were then, but the drought went on, and the people in the drought area got to think that Egypt owed them a living, so they marched and sailed south to take it, and that turned the Middle East upside down and huge loss of life and Egypt only just held them off, so they sailed west, and they invaded and caused upset right across the Mediterranean." Discussion was inconclusive, but did not break up in conflict. Afterwards we had to cross a dwelling area, and there we saw alien children for the first time. Judging by the noises they were making, they were playing at spaceships; all too soon many of them would be doing it for real. One adult looked pregnant, but that did not say how many young they manage to breed naturally and how many they have to clone. On a big roster list on a wall a few of them had distorted Earth-type names; this seemed strange, but so does the new alienese name Keghânuzgarikhk of a suburb area near the spaceport that has developed beside Mackworth, which is a suburb of Derby in England.

We crossed an open space towards what looked like a spacecraft yard. When we got 100 yards from its nearest gate, four of the place's guards aimed at us bulky two-handed rayguns that looked as if one of them could routinely shoot the tracks off a SHADO mobile or turn its driver's compartment into an incinerator in a few seconds, anti-laser surfacing or not, and I realised again that there could be no return to the old situation.

"Those things look several stages more developed from those videocamera-shaped flak-jacket-piercers that I had to get past with Shaffer and Dinkler last time I was here." Foster said, "As we know, those students all too thoroughly electric prodded the aliens out of their old stasis of sticking to the same technology, and evidence for that goes on and on. One of those guns on the Moon that time could have done far more damage to Moonbase than that alien's old-style alien rifle did merely just about managing to crack one window enough to start an air leak. Proper uniforms too: likely they're trained guards who can shoot straight quick, not that lot of inexpert scared space cadets in spacesuits without helmets instead of proper uniforms that I ran into last time."

We had to back off, but as a big gate opened to let a delivery vehicle out we saw in the yard the remains of a big spaceship with unknown writing on, not Karsa type, whose opened inside seemed to be mostly passenger rooms, being consumed by metals separators; it would next see space as the hulls and weapons and drive blocks of yet more Karsa armed craft. We also saw what looked like an Interceptor, and Foster said that from the markings it was his. There it stood on the ground under the alien late afternoon sun, exhibited as a prize, lost to us. The alien city stretched away north and west, factory-like buildings of unknown function and housing blocks; dry mountains rose on its outskirts. They offered us accomodation for the night, but we said we would sleep in our ships, and fly in them to anywhere where they wanted us to go, so we had them with us; less comfortable but we felt safer that way. HR4918 had set, and an inkily black night came on fast, and thousands of stars arranged in no constellation that Earth had ever seen. We secured our ships from inside and slept. Outside the Karsa went about their affairs as they had for centuries, unconcerned in the open, on their own world.

In the morning a native craft landed beside us. When it took off, we followed it north into high mountains. Len Carrington saw in a valley something unusual beside some buildings, and dived to look at it. We followed him and landed; the native craft followed us. People came out, in the usual issue overalls according to job, but not all were what we had expected, nor were all the buildings, for we saw that far beyond space on the alien homeworld exiled humans held into their culture as they could. At Ekhkuzgarikhk under the high barren ridge of Ighduvzdârigh they had set up a stone cross to worship round when allowed by gaps in the work schedule forced on them by their alien masters. When they could they built a church and adorned it as they could, with dedicatory inscriptions in English and Latin and Karsin, and a limestone statue of Christ the Redeemer. On the statue during each Good Friday service the acting priest as he described the Passion put on it a crown of thorns made from a native desert

bush called *khlîvan*, and overnight between Easter Saturday and Sunday replaced it with the nearest to a crown of glory that could be made with the materials to hand. The reason for the place's name was clear: *ekhk*- is a Karsin engineer's prefix for "equipped with printed circuitry", and sandblasting desert wind tended to erode the local rock into electronics-like surface patterns.

We were already in air-breathing mode; we opened our helmets. One of the locals looked at us in amazement.

"They aren't aliens, they're Earthmen. I don't believe it, it's that Straker and Foster that run that Earth defence body called SHADO that they tell the trainee UFO pilots about! Whatever are you doing here, and in alien kit!?".

"They must have captured some alien technology, likely." said another.

There we were. To the aliens we were the remote feared inaccessible enemy commanders come there and made visible. To the exiled humans we were a contact from home beyond hope. Everybody came out to look at us, people taken from here and there, leaving friends and relatives not knowing what had happened to them. How many entries in SHADO's disappeared list would this explain, either found there or by their news of other abductions?

One of them was a 9-year-old boy. I felt a spasm of anger, that the aliens in their shortage and unfeeling harvesting were even abducting children, but they told me that he was no abductee: he had been born human on the alien homeworld and had never seen Earth or its beauties and history and culture, and no Earth authority had any record of his existence. Our arrival interrupted work, and they took the chance to hold a service; we went in with the congregation. They were the expected assortment of people abducted and ordered to serve the aliens, many full of hopeless longing for Earth, and their descendants born there and knowing no other home. It seemed in some ways so out of place and like home, while above the place a barren *khvâran* sloped up steeply to a high jagged ridge called by a name that translates as "the *ighds*' patrol base ridge": the *ighd* is a large predatory and scavenging native flying animal.

"What's happened?" said Foster, for the place smelt of burnt wood and teargas.

"The smell's from us burning *khlîvan* twigs in here to try to freshen the air." someone started in alienese, stopped, and restarted in English, "I wish we had something better to use as incense, stuck here 400 light years from home, but we haven't. The stuff that sort of bush makes, it's nearly the same as what you on Earth call CS gas, but we've got to do something to hide the smell of stale people: that's why some churches back home started burning incense in the first place, such as the frankincense they talk about at Christmas. The aliens keep us so short of water to wash stuff with."

"I wish we'd known before we set off." I said, "SHADO has enough influence and flight kit to quickly get hold of a few frankincense bush seeds or cuttings from Yemen! All this desert looks just like the place for it to grow. Better than having to make the place smell like a riotsquad training yard."

"How do you keep track of Easter?" Foster asked, "Some prayer books say how to, 'dominical letters' and 'epacts' and all sorts, but it's confusing, like trying to obey a computer program yourself."

"Stand here at the base of the stone cross, it's the first Friday each spring that all of the sun rises to the left of the tallest aerial on the UFO base."

That their Easter was by no Earthly church's calender, aroused in me yet again a feeling of distance and exile and of what had caused it.

"Those paintings on that wall look like the Parable of the Lost Sheep." said Foster, "but

the scenery in them's no place it could have happened! I saw the place as we flew in. Oh well: down the ages artists have painted Biblical events with the scenery and clothes and weapons of their own times and places."

One of the congregation explained. As depicted, the sheep were grazing near that world's one small sea, where the air was damper and there was more edible grazing. The shepherd counted and came up with one too few. The stray was a young adult ram, among sheep as among men the sort who most often strays from the flock and safety and seeks his own life elsewhere. So it had strayed, up a dry gully called Zdâyakaghep, through a notch in a sharp ridge, and down the Teghdanukaghep into the dry open hollow of Entazeshk, and neither there nor on the way found anything good, neither pleasant food, nor good water, nor ewes to be master of; most of the vegetation was poisonous and/or too spiny to eat, and most of the rest tasted bad; native grazing animals had eaten what was edible; it could not find the way back home; and two *kaghds* (native predators somewhat like cheetahs) started stalking it as HR4918 sank below high distant mountains and that far world's evening darkened. But the shepherd shut the rest of the flock safely in Tekhtanzgarikhk way-station's storage yard and went in search. The *kaghds* slunk away as he found it just in time, its legs torn by stumbling over rocks, and carried it home under the alien stars.

Thus exiled Earthmen had depicted, and other events likewise. The service began, and we went in quietly at the back. Three off-duty alien workmen came in with them to see what was happening. One of them called another by the nickname "Kaghdagiran", meaning "Kaghd Arm"; the name sent a misgiving through me, but I could not make out why. The first hymn was "By the waters of Babylon we sat down and wept": all too appropriate, except that the area had no Babylonia-type natural plenty and fertility. For a while the humans could hear and sing of events outside the daily struggle to keep up with their work quotas of making and repairing parts for spacecraft and spacesuits. We sang along with them. One of them handed us a song sheet so we could keep in track when they sang in alienese or foreign Earth languages, as they did sometimes.

The service ended. They asked us for news. Most news from Earth came from the occasional new abductee who was kept for work because he had a useful skill. None of them proved to be any of the students who had gone off with aliens at the public landings at Arden by Loch Lomond in Scotland when all this started; there was indirect news of new arrivals elsewhere who may have been them. They gave us dinner. Most of them stayed in their issue overalls, as if they had no other sort of clothes. One only went into a side room and came back in an attempt at an Earth business suit, obviously a crude self-make in alien cloth re-dyed to something vaguely like a suitable colour. I had expected issue rations such as SHADO had occasionally found on dead aliens, but they served a reasonable dinner.

"Raspberries, strawberries, damsons, peas and beans, eggs, roast chicken: where did you get all this Earth-type food from?" I asked, "I can't imagine them risking spacecraft just to bring plants here."

"Except for the Big Find, in just one way, mostly - the same way as seeds are often spread in the wild: I'll explain it afterwards, not now." said a Russian called Ivan Tverskiy in strongly accented English with many Karsin words mixed in. He had been abducted in 1963 near Smolensk before SHADO started. "This *is* real chicken, indeed; the other meat's *akhten*, that's those things like gazelles that wander about the *khvârans*, I mean all these steep dry slopes. We are allowed an enclosed greenhouse to grow stuff in, if we salvage all the water we use in it. No irrigating in the open, we must rely on natural damp places. If we had a really big natural seepage like in that Ertikaghepzeshk near the city, it'd be lovely, but everybody can't have everything. We've heard of chickens and pigs in labs in the city in experiments, but they never let us have any; our chickens came from the Big Find. I've seen sheep, near the sea like on the picture in the church, they call that area 'Little Earth', there's quite a lot of Earth stuff round there, so UFO crew going on the Earth run can find something of what Earth's like before they go there."

"Yes," the boy said, "they say that on Earth in some parts everything's damp all the time, and it rains every month, and the kagheps [= dry desert gullies] run water all the time, do they really? but I can't see how they could, and the land's covered with plants and grass all over and there's forests of big trees up the khvârans and not just in a few hollows. My father told me that, but he started keep on having funny heads so sometimes he couldn't work [= migraines] and the aliens said he must go somewhere. I once saw the sun, I mean the proper sun where Earth is, through a telescope, they told me which star it was."

So they talked, in a snatched gap in work 400 light years from home. Luckily the aliens realized that many humans work better if allowed to rest from time to time. We had to remember that to them chicken was an occasional treat, not cheap everyday stuff like nowadays with us. It was strange to hear of UFO's as day to day reality, and permanent water streams as an unrealistic delusion, instead of the other way round. They explained more of life and food there. The *akhten* tasted reasonable, for it was young and did not taste excessively of CS gas from overlong droughts or overbreeding forcing it to eat plants such as *khlîvan* which it normally rejects. Three desert hares were also served, but they are small enough for them to wonder whether the carcass is worth the expense in raygun powerpack shooting it, for those humans who are trusted with guns and allowed to take them away from base. They eat kaghd occasionally, usually one shot for killing too many young akhten fawns; some say that natural clearances of akhtens are needed at intervals to let desert bushes start and grow away, but men and aliens both find it better to keep animal populations steady and use artificial means to keep them out of an area while vegetation recovers.

The meal finished, and they explained in more detail. Abductees from Earth before being stored for transport were nearly always stripped of clothes, and along with them any plant seeds in them. They told me of the first new arrival to admit that shortly before being abducted he had eaten raw strawberries and raspberries, and that the seeds from them would still be in his gut contents. Others, weary of years of eating little but alien issue rations, recovered these seeds when nature gave a chance, by hosing the stuff through laboratory sample riddles, a foul job but necessary. It is easy to think that getting seeds is easy and not worth describing, but it is otherwise when stranded beyond 400 light years and the flight of an alien UFO is the only link with home. Some of the seeds grew, and the exiles had fruit. Grape pips and a damson stone turned up later by the same route, and were recovered and planted, and some grew. I was somewhat shocked to hear such small things found in filth so celebrated, but I had to remember circumstances; from the life in the damson stone brought across the deeps of space in an abductee's gut were descended all the damson trees that straggled along the kaghep floor wherever there was damp in the soil. Likewise they spoke of "the day we found the pea": raw, having survived all hazards of chewing and digestion, recovered and planted far from home, the life in it had survived, and in a seed tray broke down stored starch made from Earth's sun's light to get power to expand its first leaves to the hard alien light of HR4918 far away. They grew it on, and the plant climbed up some plastic netting and flowered, and seeded well, and it multiplied in exile.

Later from a scrap of undigested celery they salvaged a few live cells and cloned them into embryo plants which they kept for seed; they kept the breed going as the years passed. In each planet orbit on the day when HR4918 rose the lowest in the south over the dry peaks of the Akhkanzdâran they sang of Christmas and made what they could of what they had, often for festive feast having little but alien rations or old tough teargassy *akhten*, until came the Big Find. A UFO reached Earth under cover of that year's Perseid meteor shower; its crew picked up a farm man in Canada and got away under SHADO and airforce fire too quick to strip and clean him, but they stuffed him in a canister in his clothes with pocketsful of packets of seeds and even a box of six hen's eggs, and many seeds embedded in his unwashed clothes and hair. A human from the work base was on duty in the UFO base's medical room, and got hold of the abductee's cleanings. The abductee was all too likeliest sent for organs, but the haul in seeds was like a rajah's treasure to the humans compared to their usual source of new Earth seeds. The liquid in the transport canister, plus the UFO having to accelerate slowly because of damage, had even protected the hen's eggs, and under the high barren alien mountain range four of them hatched, three hens and a cockerel, and they lived and bred.

"Yes, I remember them." said Tverskiy, "We called them Ayesha and Misha and Lena, and the cockerel Jimmy, Lucky that farm let cockerels run with their hens. We let the four live as long as they would, and at the end we buried each of them and marked the place. They lie there, under that bush. Ayesha lasted the longest: she laid over 1500 eggs and lived 11 years, and hatched at least 15 clutches of eggs; she laid occasional eggs right to the end. From those four all our chickens are descended. We've still got the six eggs: we blew the two infertiles and mended the other four after hatching. We've still got an old *khavdab*, I mean what you on Earth now call a videotape, of Ayesha the first time she went broody: she sat eleven and hatched them all, in the back corner under that lab bench. We found wheat seeds in his clothes, and they grew, so after that we had Earth-type bread from time to time. The aliens leave us alone in that, if we do all the work for them that they order. Sometimes some officers' mess or lab management wants stuff we've grown. We must get back to work: it's mostly mending spacesuits right now: goodness knows what they do in those suits, the state some of them are in when we get them to mend."

"I remember Ayesha's last egg." said another, "She was already 11; the younger hens kept chasing her away, so she spent a lot of time under the bush. Perhaps she knew that her clutch mates were below there; perhaps not. She laid there, but the aliens were keeping us very busy, and by the time we found the egg she had gone broody on it, so we let her keep it. Then I came back from several days mending solar panels in Kazdenek, and there was Ayesha with a new chicken at heel. It was a hen, and when it grew up it looked just like its mother. But that was her lot, and eight weeks later we found her dead in the morning. We buried her that evening after dark beside her clutch mates, and with her an ear of wheat, and the hatched shell of her last egg. Earth's Sun was well up in the sky: I can just about see it naked eye if I look hard in the right place."

Foster looked at a recipe handwritten on the back of a piece of old computer printout. "Uhh, 'le pain vrai', where does pain come into it!?: I thought their interrogation methods had got beyond that: oh, it's restaurant French even here, it means Earth-type bread. 'Kaghd jeune a la mode d'Ekhtenehâghin'" he read out, "this, that, most of it unpronounceable, and per some alienese weight unit half an inch of first-year khlîvan twig instead of onions: crumbs what a mixture, nearly more alienese words than English. Plus restaurant French making the text even more of a jumble. Some may call it silly, but I don't, their desperation so far away in exile to keep up some sort of Earth dinner formality as a link with home and something to keep morale up."

"We shot that one for being too interested in our hen run. Its mother likely ordered it out of her hunting area when her next cub came nearly due." said Tverskiy, "Well, what *would* you want, stuck here 2.22 thousand million miles from home?".

"Thyme, basil, mint, parsley, sage, the proper herbs that I know all about and have been tried and tested for centuries, and a few Earth-type spices."

"That'll be the day, when Earth seedsmen can deliver here. Ekhtenehâghin's a desert solar panel maintenance outpost about 270 miles southeast of here, near the edge of the mountains where there's water underground. Nearest permanent habitation in that direction. An alien who kept a storeroom there and it was also his job to supply akhten to an officers' mess in the city and keep the kaghds down, had a human assistant, who found a way to make something special of it by trial and error, and we got the recipe off him. It tastes good once you get used to it. We've tried native recipes, but they taste so strange to us. All these heathenish placenames in no language of Men: oh for one more sight of my own world where the land has plenty of wild vegetation on and the placenames are in a proper natural language."

"Hang on." said Len Carrington, who had opened his spacesuit and was feeling in his undersuit pockets, "Here's a few parsley seeds. A packet leaked while I was bringing it to base to sow some in seed trays a few weeks ago. At least that'll be the start of one sort of Earth herb for you."

So much for an attempt to reconstruct what they could of home; but all around the alien wilderness spread. To the north the 'Stegosaur's Back', as some of my men called the Ighduvzdârigh, was most of the skyline, and beyond it the Khvîyanzdârigh mines were hidden somewhere among a tangle of hills and kagheps. To the south, someone going over the high passes of the Akhkandzâran range sees only the endless flat waterless desert of Kazdenek, which means 'Characterized by Whirlwinds'; much of it is covered with a uniform dark tiling of solar panels, and there is no permanent habitation in it nearer than Ekhtenehâghin. Beyond it below the horizon is the volcanic badland around Zlîkhabaz, 'Wildfire Mountain', where native industry gets what it could from the heat and eruption products. The planet's one small sea, and its one and only river that for a few miles flowed all the time, were nearly two thousand miles away to the west. Conversation returned to practicalities.

"We heard of SHADO before you came: once or twice one of us overheard alien pilots being warned about them." one of them said to Foster, "Is it true you were abducted and brought here and actually managed to get away home? Sometimes we daydreamed or sang of a SHADO fleet coming to take us home, no more hope of that it seemed, than when black slaves in the south of the USA in old times sang about Elisha's chariot of fire coming to take them back home to Africa. And they say you would have managed it, if you had had a year or two more before those students at Arden spoilt the matter. A few times a few of us talked of heroics, declaring ourselves to be a SHADO unit in exile and taking to the hills and fighting to the last, but no point us doing that. Two and a bit Earth years ago, eleven men away southwest at Vaghdizgarikhk actually did when they got tired of seeing batches of abductees brought in, and they were soon caught: their food ran out, and one of them risked shooting an akhten, and something detected the shot. As the search squad closed in they took some sort of chemical to make their organs useless for transplant, so they were brought in and firing-squadded by six guards from the UFO base with those new rayguns that you saw: each time aim, two seconds blast from them all at once evaporated him, there was a flash flame as everything that could burn did, the wind blew everything away. A fused patch on a wall instead of a patch of bullet holes, but the same meaning."

"Any idea where those abductees came from? What species? Where from?" I asked. This brought matters to more like what SHADO had been set up for, and I wondered how and when enough UFO's had got past SHADO defences to abduct so many.

"Some were like nothing we'd ever seen. Some looked human and someone said he'd heard one of them, a boy about 18, threaten in South American type Spanish that some hard well-armed street gang would come and exact retribution."

"Likely he did." said Marie Dumesnil, the small boy's mother, "I lived near Bordeaux in France. The aliens got me in 1969 when I went into the fields out back one night to see where the cat had got to. There'd been an interference on the radio earlier. It took me three weeks to finally realize that I wasn't in some strange place on Earth. They had me working in a transplant building until thank God they moved me here. Police, solicitor, work boss, the dog, fellow gang members and an endless variety of veiled threats and trying to make deals with us, union, 'me mates', the staff that I was with were threatened one time and another with having all those set on us, here 400 light years out of reach, but always an anaesthetic mask stopped it and that was the end of him. Sometimes they were told they'd been in an accident and they were in casualty in a hospital on Earth. I remember a teenage girl they brought in. She still had a plain pale orange sleeveless nightdress on, it was soon after I came." and described her, "A UFO pilot got her heart: his own had *paktivârig*, that's a sort of inherited valve and control system degeneration, and it was getting bad. A lot of the aliens develop it. That was a multiple transplant: the other organs came from an alien who'd died in a work accident. Someone said some of those organs were already transplants. What they do to their own people's their business, but they shouldn't steal from Earth. Saying 'I was short of something's been the first excuse for stealing from the beginning.", and I knew I was hearing the last news of Leila Carlin.

"A sweet girl she was." Marie continued, "A few times she called for someone called Peter. All the fun she could have had, and the children she could have had, and instead she was dragged here and broken up for spare parts to mend their own rotting bodies, and here I was stuck watching it among aliens, aliens, aliens, everywhere yet more aliens, and before they got me I hadn't believed in UFO's or aliens. Other times they brought in stasis canisters full of organs and bits, and sometimes their ships were in a bad shot-up state and we had to help mend them so they could go get more 'transplant material'. So here I am stuck out at Ekhkuzgarikhk, still having to work for them, and my son Simon was born here. I haven't had a chance to talk French for many years. I don't suppose I'll ever see France again. I wish I could go back home and see green plants growing everywhere and natural water all over the place, even if I never see a spaceship or spacesuit or spaceman or have to say another word or name in their blasted language again after that. At least back in the city there were more people to meet and talk to and more news to hear, even if most of them are aliens, once I knew enough of their language to get by. The last three times I've had a proper talk with anyone from outside instead of merely a few orders and work questions, were with that mechanic Khlîv-whatever when I happen not to be away working when he comes from Jake's Garage or however it's pronounced, that's away west of us, to check the wiring and the electronics."

"Zdeqhanzgarikhk." someone corrected.

"As to why they have to keep abducting, Shaffer told me of their Time of Cities and the Great Crash that ended it." said Foster, "It must have been quite a feat, supporting that many

people on this planet's resources, what with the usual things that get allowed or fashionable among an urban population further and further removed from practicalities. He told me this bit of what they call the 'Records of Kazdinak': a native woman after the Great Crash wrote this: 'We sinned with wantonness and young girls breeding long before it is fitting, and so the gods now make us all do that whether we want to or not, punishing us for our overweeningness, every female breeding as soon and often as possible so a few can survive to breed. What good is it that I have borne 23 children and have already buried 17 of them with this or that organ failing, and I am pregnant again? Now my husband is gone, from liver failure, but I could not bury him, as the hospital demanded the rest of his organs to help others to survive. May 'Those who dwell on Karsum-Inagh' grant that Kazdinak finds some help for us in his wanderings in the outer void, after our expense and labour on top of all the other hardships of this time, developing a spacecraft for him.'."

"And it ended up with: 'Home came her sweet heart, but home never came she.'." Len Carrington said, altering a line from a poem that he remembered from school, "It may be all so well giving her name to the cold metal and weapons and computer brain of a space warship, in memory of her, but that doesn't get her back. Here we are on the alien homeworld, which a few years we thought would be impossible, and somehow I still can't quite believe it; but what good are we or SHADO getting out of it? I will be mighty glad to get home and I can look in a mirror and not see my face looking out of an alien-type spacesuit."

Some would say that, if her life was precious, so was the life of the alien with the bad heart, and the lives of all those who died in the Great Crash. Knowing that they have a scar like that across their recent history, more are tempted to sympathize with the aliens. But all too many people treat one life as precious, but think of a lot of lives together largely as "numbers grossly in excess of what available resources can support", and again I realized that there is no permanent good answer that will keep on solving everything.

During this it had been gradually getting darker. I looked out, hoping it was that rarity, rainclouds to lay the dust and heat and renew the ground water and make the land briefly fertile, but it was not so.

"It's only a sun eclipse." said a native caretaker in a green overall. On HR2718.III the larger moon is apparently much bigger than their sun and its orbit is very near their ecliptic. Eclipses caused by it are not a public sensation but tediously frequent, interrupting work, often total for over half an hour, and very dark at mid totality with much of the sun's corona hidden.

He was the one nicknamed "Kaghd Arm", and now I knew why, for as he reached his left arm up to a mains switch, the overall sleeve fell right back. The arm was several shades darker than the rest of him, up to a clear surgical cut and join line two inches below his elbow, and its forearm had a blue tattoo, not of a native desert *kaghd* but a thicker-set wild feline, with a ruff of hair round its neck: an Earth lion, jumping, wearing a wartime German helmet, there far beyond space and both symbols utterly out of place, and I remembered Montevideo.

By then we had recorded the humans' names and what else we could about them. It was quickly getting darker and colder although the sun was high. The base's chickens roosted. We went out to look. Sunlight dapples under a damson tree in their big greenhouse had turned into dozens of little crescents. The ominous shadow of totality ran towards us along the high jagged dry crest of the Ighduvzdârigh and reached us. What was left of the daylight went out as if someone had switched it off like in a supergiant film set. It was weird. So I stood in a dry valley on the alien homeworld, watching my first total sun eclipse - on Earth I was too busy with films and SHADO to chase after eclipses and suchlike. Three ighds with their unsightly

stretched-skin wings flew up shrieking from a peak across the valley, trying to scare away whatever was wrong in case it was after their young. Two "Bailey's beads" quickly vanished as the last of HR4918 set between mountains on the edge of the moon. Then the stage that I would not see on Earth - the last of its chromosphere vanished, and then gradually the inner corona, and it became not like full moonlight as on Earth but black night. Hundreds and then thousands of stars appeared. Foster got binoculars out and told us where Earth's Sun was. The remaining horizon twilight eastwards faded away. "Better come in: this one's going to be a long one." Tverskiy called from a door. The humans and natives who lived there switched lights on and carried on with their work as they could.

We stood there as it got colder and colder and totality went on and on. The sun reappeared at last, and the shadow raced away eastwards. The day restarted. We serviced our ships and took off northwards, to another place where humans were reported to be. The place of exiles who beyond hope had had contact with home, dropped behind us and vanished behind the Ighduvzdârigh as we flew away, and Ekhkuzgarikhk was left to its work rotas and the aliens. But at least now they could grow one more species of useful Earth plant than before.

We flew on over the hilly dry land. What was I doing there? I should have been there at the head of an army stopping the abductors from raiding other worlds, overrunning by force the alien cities and the home bases of their man-stealing UFO's, not as a polite diplomatic guest of them. The tangle of ridges and gullies went on, and the endless sameness of alien names on the map, as endless as SHADO's job of shooting down endless incoming UFO's only for yet more to keep coming. Embikaghep. Akharnikaghep. Akhtenzdâran. Sigvarnazdârigh: that means "Three Towers Ridge"; on it were three high buildings left from the Time of Cities, and few if any now knew what they had been built for. We knew where the mines at Khvîyanzdârigh were, but we had been ordered to keep away from the place. An enclosed plain around a mountain called Kharginabaz that looked like an Interceptor, and I remembered again what I had hoped for and how it had turned out. A hollow with scattered low dry bushes in, called Ekhtenekhlîvan. Aghgizeshk. Malikhvâran. - Pelkizdakaghep. That name for some reason stuck in my mind: it means "UFO Wadi". As we flew low over it the reason was clear: where it turned a right-angle the rock sloped back like the side of a 'spinner' craft but much bigger, and a hard layer at the right height had eroded into a rough likeness of three and a part gravity plates.

"They call that rock formation Kazdinaket Pelkizd, Kazdinak's UFO." the escorting native craft radioed, "After the Great Crash, Kazdinak found how to fly faster than light. Some say the gods told him how; some say otherwise. So he built a huge spacecraft, and gathered a crew for it, and in it he explored far and fast across space, and brought back much useful stuff in it, and fought with gangs from off-planet who came to prey on misfortune after the Great Crash and make bad worse. It was a craft of great size and power, and your SHADO could have fired missiles at it all day with little effect. There are many tales about him. He taught us how to fly far in space. He was the first to wear a spacesuit like those we use now. When he got old, he, or the gods, or something, decided that having a fleet of craft like that would make us too ambitious and too wasteful of materials making them. So They sealed his ship all over with a layer of stone and buried it in rock far out in a desert. The spinner craft that we use now are only an echo of its size and power. He got in a small craft and flew away in it, and has not been seen again. Since then, flash floods in the kaghep have dug out a quarter of its hull. Some say that if nature or venturesome men dig it out completely, and then men find how to get into

it, that will bring either great good fortune or great lasting harm. Until then it lies there, and from time to time a flood turns the corner round it and uncovers it a bit more, and no-one knows what secrets are hidden inside it."

Thus he said. Likely Kazdinak was a space pioneer, but reality would have been less than described. Perhaps it was his birth-name, perhaps it refers to the spinner craft that he designed: 'kazd-' means "whirlwind". But what would oral retelling down the centuries add to the deeds of our Gagarin or Armstrong and Aldrin or the like, matter brought in from later spacemen's deeds and mixed with fictional characters, primitive short-lived short-range craft enlarged into a far-travelling starship, and mighty deeds in remote star systems?