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Orbiter One

At Worlds End

by Cliff Dale

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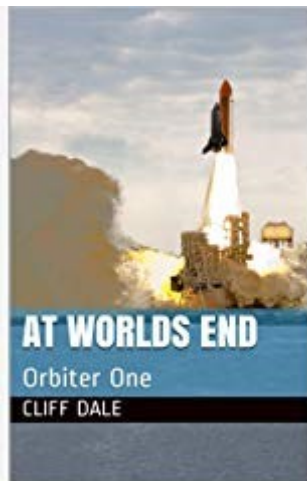
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Content

1. [Current Affairs](#)
2. [Beginning of the End](#)
3. [One Up](#)
4. Rangers Away
5. No Sense of Direction
6. Charlie's World
7. First Impressions
8. Goodbye Cruel World
9. Distant Farewell
10. Welcome Aboard
11. Ground Zero
12. Truth Revealed
13. A New Day Dawns
14. On the Move?
15. Making the New Straker
16. Master Class
17. First Day on the Job
18. Week One
19. The Station
20. Off Time
21. Ringing in the Changes

22. The DR12
23. K17
24. Land Ahoy
25. A Window to Destruction
26. Cloud Break
27. Finishing Touches
28. Straker's ESB
29. Full Speed Ahead
30. Lunar Projections
31. The New Global Map
32. High Speed, No Drag
33. Firepower
34. New Man on the Moon
35. So Far so Good
36. Time for a Change
37. Beginnings of a New Generation
38. Heavenly News
39. Proposals
40. Serendipity
41. Life Marches on Regardless
42. Revelation

Glossary

[About the Author](#)

[Other Titles](#)

1. Current Affairs

To say the political situation is tense was something of an understatement; the planet was on the verge of war.

Tension in the New Middle East was reaching fever pitch and the rest of the world was nervous, and they had good reason to be so, but most of the population had no real idea why the situation was so different now, not much had changed for a hundred years or more, the diplomats and negotiators knew otherwise.

The most frequently asked questions on the constant news bulletins were simply, 'how the hell did we get here again,' and, 'who is to blame?' This only added to the furore and just heightened the tension that was already at breaking point.

It was school kid current affairs really, everyone was taught it, but few understood its roots, no doubt the New Middle East version told the other side of the story, though which one was factually correct was anyone's guess. Many suspected the original reason may have been forgotten, and it was often suggested that the protagonists didn't actually know either, and, given the current climate, that was perhaps understandable. All that was really known for sure was that the problem started some three hundred-odd years ago in the 22nd Century, the who and the why, the where and the what for, the important bits, they were missing. What was certain was that several of the old Middle Eastern States had declared war on each other to try and regain some economic advantage, of course, most of the populous of every other nation could plainly see that this action was pointless, once you had won any war with your neighbour, the next battle was to cope with the economic cost of restructuring, this cost simply outweighed the gain of any increase in revenue. It was not to make any difference; they just bombed the crap out of each other anyway, at least they used conventional weapons, Nuclear weaponry being globally banned many, many, years previous.

The general consensus of TV opinion was that current 'problems' were the result of economic sanctions imposed hundreds of years before, though the term 'sanction' was probably not correct. Several nations had attempted to broker all sorts of deals, offered various economic rescue packages, but it was all to no avail. The use of oil-fired anything had been in steep decline since the global warming disasters of the late 21st and early 22nd Centuries, and now, there was almost no use for oil-based products at all, especially as a fuel source. The many environmental problems were blamed squarely on the use of fossil fuels, and the world's population demanded alternatives be used, the effects of this had ensured swift economic hardships on the once oil-rich regions, no-one wanted to use their oil as a fuel anymore, and the revenue from this most natural resource dried up, these once economically powerful nations had simply become insignificant in the greater scheme of things.

Later, the loss of nearly eighty-five percent of the local population to various natural disasters in these areas didn't do much other than aggravate the economic situation either, and all the religious and political leaders could see was their lack of standing in the 'global community', the loss of face, they pandered to a foolish pride, so they did what humanity has been best at for centuries, they went to war.

There is nothing humane about war, and it is humanity that is usually the biggest casualty.

As for the planet, late 21st Century Mother Nature bared her fangs, the atmospherics of the globe changed very quickly indeed, and this was catastrophic for the most prolific and parasitic life form on its surface, Mankind. What appeared to be a trivial rise in temperature, was disastrous for the soil all around the globe; the levels of heat, the increase in rainfall, and the destructive winds, coupled with a regular shifting of the tectonic plates, these all destroyed much of the agriculture, not to mention the people. By the beginning of the 22nd Century, the normal growing patterns established over many centuries, had shifted, spring was but a three-week blip, summer was hot, dry, and some six months long, autumn was now a wet and windy three months, and for the next two months, a harsh winter simply froze everything solid to a depth of about half a meter, animals and man included.

The polar ice caps had cracked and melted, and ultimately shrank at an alarming rate, they were still unstable now but were holding at a quarter of their 21st Century size. The sea level had never receded by much either, considering the rise rate of over 75 meters in just 55 years, and a further 35 metres over the next 150, and the waters had already risen 40 meters in the mid-21st Century, it was surprising that there was any dry land left at all. Right now, the waters were at an all-time high, thankfully, it was no longer rising, but the sea defences were regularly breached in many locations. The cities and towns that were on the new tidal rivers were having to install some sort of gates to keep the water out, and the traditional seaside vacation destinations were already underwater, the extra 150 meters just added to the already greatly changed global map. The loss of so much landmass to the sea had altered many national and international boundaries, the frozen lands of the Scandinavian and Nordic countries, along with Iceland and Greenland, were underwater in the main part, that, and the rise in ambient temperature, starved, baked or drowned some sixty percent of the global population.

Many of the islands all around the globe had simply vanished under the rising tide, along with much of lowland Europe, and the Middle East, the Asian, African and Indian continents, they had taken the biggest ecological battering of all, being the naturally hotter, wetter, or lower parts of the globe in the first place. Nowhere was unaffected, crops failed, global starvation followed, and more deaths, the seas rose further and swallowed even more vast chunks of the landmass, oceans heated, and many of the fish simply could not adapt, the rising temperatures added yet more ice melt. The migratory patterns of many fish changed, they had to go deeper to escape the rise in temperature, this put them out of reach of the sea birds and aquatic mammals that fed on them, and the rising water levels meant many of the migratory

birds had no landmass left to breed on, many species simply died out. The food chain that had taken many millennia to get into balance was devastated in just over half a century.

There were now new types of flora that had evolved, many of these added to the warming effects, and were fuelled by the rotting animals and vegetation of the submerged landmasses; on land, the bacterial algae multiplied in the still waters of the inland lakes, poisoning the water man depended on, and killing the freshwater fish. The planet's landmass itself took on a new smaller shape, and the seismic activity increased, in some part, because of being further submerged, there was an extra increase in pressure on the local tectonic shelf, and this seismic effect was nearly always extremely violent, and underwater, where it was close to land, it simply just pushed the water further landward. The horrific destructive power of a tsunami, and the tragic loss of life, was all too common a feature of the old newscasts, and where there was destructive volcanic activity on dry land, the eruption was often without warning and spectacularly devastating, but where there was a rumbled warning, the pyroclastic blast of hot ash and volcanic gasses further scorched the flora and fauna, in places, even the bacterial content of the already dry soil was destroyed. Many countries that had not seen volcanic activity for hundreds of thousands of years, now saw eruptions in long-dead volcanoes and mountain ranges, the death tolls were globally staggering, measured in the hundreds of millions.

It was no wonder that the population demanded changes, they had been talking about the impending disasters for years, hundreds of years, but no one had the political will to defy the big businesses and force the changes, not until it was too late.

The consequence was oil-based consumption took the brunt of the blame, the motor car and its aerial counterpart, the aeroplane, were considered by many, to be the biggest culprit, and in the main, these were simply replaced by battery and solar-powered alternatives. The reliance of industry on the oil or coal-fired production of energy also ceased, many of the nuclear-based energy production centres were now underwater, whilst a pollutant at the time, they were not a danger to Mankind in the explosive sense. Solar power stations became the norm, wind farms and wave generators became a common sight now the use of the forces of nature was pressed upon man, the financial cost had become immaterial.

The science was sound, the evidence was clear, the projections were agreed, and the people were convinced, but they were not the ones in control, the outlook was not good. The history books showed that this one failure to act (on the several occasions it was proposed), was blamed solely on the country that was then at least, one of the biggest global producers of pollution, and on some of its leaders of the early 21st Century, it led to many a civil disturbance wherever its politicians went for many years to follow, and rightly so. The evidence showed it was avoidable, the changes that should have ensured the safety of a global population were stalled, all because it affected profits, in the end, everyone paid, eventually, many of the big companies also suffered, their expensive factories and storage facilities were underwater, some were reduced to rubble in a seismic event, and it served them right, it was their own fault.

All this destruction and mayhem would be blamed on just a few senior politicians, many were too blind to see past the additions to their bank balances, funding supplied by the business money fuelling their ego trips on the campaign trail, a simple signature on a single document could have paved the way for a greener global practice; instead, the money men, those controlling the political figures of the time, had condemned future generations to a global disaster that nearly all the world told them was coming. The atmosphere took nearly one hundred years just to stabilise with man's intervention, or perhaps, despite it, and over the next one hundred, it slowly returned to what was considered to be normal in the mid-20th Century.

A direct result of more sea mass was the bonus of a slight increase in atmospheric pressure, this did result in the closing of the massive ozone holes, it wasn't quite the solution that everyone wanted, but the effect was welcome.

It was about two hundred years ago that the weather patterns seemed to re-set without being prompted, it appeared as though Mother Nature just put them back into the proper timelines, albeit out of the traditional sequence by some four months. The seismic activity slowed to almost nothing, much of the once volcanic regions, now cooling rapidly under countless litres of saltwater, were seemingly resting, and many said it was the firestorms from Mars that did it.

The scientific community knew where the firestorms were from, and it was not from Mars.

The 22nd Century nuclear powers agreed to a plan of action, and the rest of the world followed, the Nuclear weapons of the age were simply rounded up and launched into Space, and at a safe distance, detonated. Many of the underwater nuclear sites were finally cleaned up, the collected material also shunted off into Deep Space, not cost-effective, but environmentally better for the planet. No one really looked at the damage or effects of the detonation of so much unnatural nuclear contaminant in Space; it was considered that the effects were not measurable in the vastness of the cosmos, there was plenty of other radiation naturally occurring out there anyway.

What was not envisaged, was that much of the nuclear debris would return to Earth in such a short period of time, some eighty years later a hailstorm of nuclear shrapnel would see the sky across the globe turn a bright purple for around a month. The result, was to kick-start the cycles back into shape, and the weather patterns were almost switched off, re-set, and de-tuned, the level of global radiation was minutely higher than it had been, but not as hazardous as those who knew about these things had feared. The nuclear light show just reinforced the layers of the upper atmosphere, adding another set of filters, no one was quite sure what they contained, but they filtered the sun's radiation better now than anyone would have dared to hope. Much of the new varieties of plant life that had spawned could not survive the sudden resetting of the global weather and temperature patterns, and most simply just died out in a very short space of time.

The animal kingdom had taken a real battering, the insects were the fastest to acclimatise as they always were, the reptiles followed, and the birds were quick to adapt where they could, and the freshwater fish, like their deep-sea counterparts,

would take much longer to recover, even now, a freshwater fish in the wild was a rarity. As usual, it was the mammals that were slowest to adapt, they suffered the worst, many thousands of species became extinct, much of the natural wildlife perished, many because of the climatic change as much as the loss of their habitat to the waters. Domesticated animals were kept alive, Mankind was not quite daft enough to see his major food source perish, but the pet animals, the dogs and cats, small rodents, they were a luxury that man could not afford, but the lowly wild rat thrived. The rat, at one point, was the biggest danger to Mankind's survival, the old newscasts told of huge hunting packs coming from underground hideaways to eat their way through towns and villages, a horror that occasionally included the eating of the people. Old-fashioned poisons sorted out the problem, but in places, the rat was still a dreaded creature that provoked an overkill response from a fearful public. There were a few good things to come out of the disasters, but you had to look hard in history to find them. For example, as a direct result of the nuclear purge, many of the once-powerful nations were no longer such a threat to anyone else; by the same token, their natural enemy was fairly weak also. Somewhere in the early days, the leaders of the major world powers had the sense to help each other for the good of all Mankind, an effort was made to stabilise the forces of nature before the planet actually ripped itself apart. The stellar implications of this event were again not considered, if the Earth disintegrated, then the gravitational forces of the Sun would be seriously disrupted, something had to happen to the rest of the planetary alignments, but no one considered this in any great depth, it was not a necessity at the time, after all, if Mankind was not around, what difference would it make? The Martian firestorm should have sounded warning bells, but it was just received as a sign from whatever God you may still have believed in, otherwise, it was largely ignored. The scientific community simply measured the difference, said 'there, there, there,' and, 'we told you it would be OK', then left it alone to continue with whatever it was they had been working on.

But that was then, and this, is now.

The technological advances of Mankind had slowed, the problem of how to save what was so nearly destroyed, took precedence over financial gain; though some financial reward, in the end, had not escaped some people's attention. There were advances in Genetics, Hydroponics, gravitational manipulation, radiation shielding and some major medicinal discoveries, but otherwise, particularly with the simple technologies, Mankind stagnated.

Many things did become simpler, manufacturing went back to basics, but the greatest changes were in power generation, the nanowire and black crystalline solar energy panels played a major part, wind and wave power became the accepted choice of supply, there was now a much bigger mass of water, and the wind was now more constant as well as unrelenting, it was a logical choice.

The global weather patterns were not much different anywhere on the planet, you could go from the new top of the American continent to what was left of the bottom of Old South America, or go east to west, and the temperature change, wind patterns,

and rainfall measurements didn't vary by much more than five percent. The old North American deserts were now much more temperate, but ecologically, they were still barren, it was the same with the African and Asian deserts, sand was still not nutritionally up to growing much more than grasses. It was now possible to travel halfway around the globe and the weather would not be that much different from where you just left.

The Global map was very different from the 22nd Century one, much of the old coastal regions were now under 110 metres of new water, and most of the new seaside resorts, all around the globe, were nothing like the holiday centres of old. Holidays in foreign lands were not at the top of people's list of things to do anymore, travel was difficult, it was also expensive, and to a point, the landscape was not much different from where you lived, it made sense to stay 'home' and find alternative things to do for recreation and relaxation.

The firestorm did put things back to some sort of norm weather-wise, it allowed Man to flourish once again, perhaps severely weakened, a touch more respectful, and with a greater sense of a global identity rather than a national one. It was in the latter part of the 23rd Century that things started getting back to the normal human behaviour in many respects, and that was not a particularly good thing.

For many a Nation, its identity was already rebuilt, and economies had been adjusted to the new lifestyles that were a necessity, but this is also where the rot started to set in, this perceived lack of standing in the greater scheme of things rose again. The problem was not amongst the populace, but at a governmental level, there was not so much an attempt to instil some sense of national pride, it was about the saving of political face.

It was pointless, many nations were just a shadow of their former selves, and the 'you have more than I have,' and the, 'I want a slice of that,' brand of political arguments arose, especially from the smaller nations; but the big three were comfortable with the way they did things for their own people. The threats of economic sanctions from those big three, the United Chinese-Russian Federation, the European Federation, and the United Federation of the Americas, with a further threat of occupational peacekeeping forces, stemmed much of this arrogance, but not all of it.

Sporadic localised border skirmishes often took place all around the smaller nations; offensive posturing was the diplomatic terminology, and the bigger and richer nations sold their energy to the poorer ones, those who could ill afford the infrastructure costs, yet they refused to sell the technology or invest in these nations, and this incited the posturing to escalate beyond local borders as the costs went up, but the national revenues did not. Some places managed to balance the books, and kept a lid on the unrest, but they were still struggling. As a percentage of the landmass, much of Africa was a bigger desert than it had ever been, it still battled to feed its population as it always had, but it had massive solar power farms with which it bartered energy for food. Many nations still struggled with food manufacture, the old coastal regions, traditionally higher food production areas, were very much underwater, new

coastlines were many kilometres inland, and now, the importing of foods by sea was difficult as well as dangerous.

Europe was severely affected; in many places, the traditionally lower coastlines meant that rises in the sea levels had a disproportionate effect on a coastal region than of other continents. There were exceptions, India was also now much smaller the sea had isolated it further, but the waters were often too shallow to navigate; the Asian continent was much changed also, a smaller landmass with a warm but less humid climate, and a population that was some ninety percent lower than its former total, the many islands off the old coastlines were just a blip on underwater sonar. Some of the heavily industrialised island nations were no longer visible on the global map either, Japan all but disappeared, and eighty-five percent of Australia was underwater, the rest nearly an uninhabitable wasteland, and the many nearby small islands, all gone. The Americas fared no better, the Gulf of Mexico was now part of the much-expanded Atlantic Ocean, and a large amount of the top of the western side of the South Americas was no longer visible, the Californian coast had long since fallen into the ocean, and the new coastline all around was many kilometres inland from the 21st-century locations. The familiar towns were just a part of history, San Francisco was but a memory, even on the other coast, New York was underwater, only the tallest buildings showing above the waves, at least those that had not already succumbed to the corrosive effect of the waters. The ancient capital of Washington DC was also destroyed; they had made valiant attempts to build barriers to keep the sea out, but the weight of water, and the power of the ocean, were just too great. Much of the Far and Middle East was also underwater, the naturally flat expanses of desert regions offered no resistance to the higher sea level, what was left they just squabbled over rather than co-operated. There were around 120 countries who were forced to nominate a new capital city, many capital cities of old were built on waterways of some sort, and most disappeared under the waves over time, London, Paris, Rome, Moscow, Budapest, Dublin, Amsterdam, Berlin, Prague were on major rivers that flooded, and coastal cities of Buenos Aires, Montevideo, Manila, Cape Town, Copenhagen, Helsinki, Stockholm, Doha, Tokyo, Tripoli, Wellington, Valetta, and many others, all sunk beneath the waves.

It was so typical of human nature that war was inevitable, some nations were already in conflict with their neighbours and had been for years, and religion did not figure that highly in many of the present global disagreements. Many of the old religions had just faded away, and people now believed that the true power was not a God at all, but was Mother Nature herself, Gaia was her given name. This Gaia was seen as the true way, and the entity was not there to be worshipped, but revered, to be cared for and considered when making economic and ecologic decisions, no more could Mankind say with any certainty, that what he did would not have a detrimental effect on the global pattern of life, Gaia now had to be considered. There were still some religions, mainly the doom and gloom merchants and other parasites that preyed on the misery, and sometimes the gullibility, of those in need. The old-time traditional religions took a real hammering to their credibility when the rising waters and the

earthquakes came, eventually giving way to the droughts and famine, and several of the Western religions just passed with time, it was the old Eastern traditional religions that generally proved to be the stronger, but even these suffered greatly, and the so-called blind faith eventually perished along with the masses. There were many small cults that sprang up and then faded away just as quickly, and in general, the lack of divine compassion, no matter which was your God, finished off the faith of many a believer. For many, it was their trust that had been stretched to the limits, waiting for a sign of intervention from their own manifestation of the divine being, sadly, it never came.

It was not lost on the historians how things had come full circle; the ancients had long ago worshipped Gaia before all other deities; perhaps they were right after all. What surprised many, was the length of time it took to get here, to this state of stressed diplomatic relations, this strained series of affairs had existed for over a hundred years. What was also surprising, was that the really old stuff, a thousand years and more, was better documented than the last three hundred, but no one was too bothered. The timelines, it seems, were always confused, and what really came where, or the when, modern historians could not really agree on; that it happened was not in doubt, many though, were saddened that after all these years, after all those harsh and painful lessons, much of Mankind had not learnt a damned thing.

The way the world interacted had changed after the early global environmental disasters and seismic destruction, once the power output links had been stabilised, and with the cabled connections of the NetWide restored, global communication was again possible, though early on, the satellite links were unusable, the radioactive interference was too disruptive. The transport side of commerce was not so easy to restore, all the traditional seaports were several kilometres out to sea and underwater, travel to new ones was extremely hazardous as many structures in the submerged old towns, cities, and even natural hills were a new uncharted underwater danger. The many airports were likewise under the flooded landscape, many of the aircraft already decommissioned until less polluting alternatives became available, international travel and goods shipment on a regular basis was suspended, to a large extent, it was not required, these days', any travel for recreation was still very expensive and not often used, tourism was globally almost non-existent, and international business was more often solely conducted via the NetWide, international goods transportation was often just sent by sea, where it was sent at all. The fairly consistent temperature around the planet meant that what was once a fruit or vegetable of the hotter climate, could be grown almost anywhere, and the hotter zones now being more temperate, could grow the foodstuffs normally reserved for those areas with a higher rainfall, so food around the globe had become less exotic out of its original growing locales.

So, to return to the current affairs, the much smaller Middle Eastern region warred within itself for the last one hundred years, the old Western nations did their own posturing in agreement with each other once again, and then, in the last four months, diplomatic posturing just escalated. This was in no small part due to reports that the New Middle East possessed the old type Nuclear weapons, what was not truly

understood at the time, was how much they were prepared to use them. There were also the so-called 'Smart' bombs, they had been around for what seemed like millennia, but in fact, it was only some 180 years, this Smart technology was, in effect, 'clean,' when compared to the dirty fallout of the Nuclear devices, sure, it killed people and animals, but it left most of the buildings, soil and plants, almost undamaged.

What would be debated much later was, how could so many of these dirty bombs remain undiscovered until brought to the surface ready to be used in anger on the rest of the world?

Perhaps, the really sad part was, how few people would be there who could join in that debate.

2. Beginning of the End

There it was, a massive lump of various metals and carbon-carbon tile with an incredible power locked within, all ready to be unleashed at the simple push of a button. It looked a horrendously expensive piece of the latest in 25th Century technology, in reality, it was mainly old tech specs with a few new bits; it was, however, expensive.

It just sat there, deceptively peaceful and glimmering in the midday sun, it was pointing skyward on a slab of concrete, surrounded by a spider web of steel gantries and cabling, vapour rising off its shell from what appeared to be leaks all along its streamlined shape, it was a huge black obelisk pointing to the clouds. Strangely, it reminded Straker of his first love, he wasn't quite sure why, she wasn't that big. He read the name printed on the side, Ranger One, he glowed with pride, this was his very own spaceship, well, it belonged to the International Space Administration, the ISA, but he was the Commander, it was, in that sense, his ship. It had not long been built, a modern replacement for the original and now decommissioned Ranger One craft, nearby, stood two more Re-Usable Space Vehicles (RSVs), he knew these as Ranger 6 and Ranger 7, and lost in his own thoughts, Straker remembered the 'others' as he always did before a mission. R2 was lost in '38, well before his time, R3 was lost some twenty years later in 59, he could clearly remember seeing that one explode on take-off; he was six at the time, spectacular coverage on the TV news, strangely, it was then he knew he had to fly one someday. R4 was lost Gaia knows where, all that was known was an engine systems malfunction had engaged the main return thrusters, they fired Ranger 4 into Deep Space somewhere. The velocity recorded was faster than any Earth built ship had ever gone, and much faster than the design limitations of the craft.

They didn't find many clues.

All the relevant information came from an emergency distress recorder found on the dark side of the Moon, discovered when the rescue mission ship picked up the pulse signals on its return journey. A testimony to the Captain's courage and determination, he made the time to jettison it before he would have been immobilised by the forces of acceleration, and before his own inevitable death. Straker often wondered if he would be brave enough to do the same thing in that situation, he was fairly sure he would, but not totally convinced. That rescue mission was Straker's first flight into the deep dark and fascinating other world called simply Space. The mission, they all knew was pointless before they started, but the public demanded they try. All they recovered were the stressed remnants of around a tenth of the RSV before they reached the fuel limitations of the mission, but they did learn plenty from the analysis reports. Sadly, the remains of the crew were never found, implosive decompression in

Space doesn't leave much of soft materials. Ranger 5 was in for repair in one of the several giant concrete hanger-like workshops, it had suffered some minor damage whilst 'joyriding' on its last flight. Straker huffed, minor damage my ass, it had been hit by some space junk, an old satellite which had malfunctioned years earlier had suddenly, and without warning, put a sixty-metre dent in the side of the ship, this old defunct junk had become a born-again piece of angry hardware. The incident had scared the crap out of the passengers, not to mention the crew, and the craft spent an extra three days hanging about while the rescue team arrived to disentangle the bent wreckage, they were able to get Ranger 5 back home after another few days of repair work. The passengers were transferred to the rescue RSV craft in a short spacewalk, a bonus they didn't have to pay for, something most would have paid extra to do without.

There were two more RSVs in the final stages of production, they were reportedly nearly finished, and both were to be the newest additions to the fleet, another two had been authorised for construction, but they were still on the drawing board. Straker was to command the first of them, he had completed his sim training, final in-flight testing was scheduled for around six months' time. The new ones completed were the very latest in modern technology and materials, fractionally bigger, but definitely better, faster, and more manoeuvrable, they had a slightly modified design and shape, perhaps the major change was the revolutionary dual power plant with a fuel load that was designed to last much longer. The real difference was that the launch was more like a conventional aircraft, all it needed was a long runway, and there were several of those it could use. There were also four Cargo RSVs, all four were out there somewhere in the Deep, and they had been for quite some time. No-one knew what they were up to, there were all sorts of theories about new weapons, Space Stations, and encounters with other life forms, there was the usual speculation on what type of secret experiments were being performed whilst out in Space, pharmaceutical, biological, genetic, Smart, even a new drive system, all sorts of crazy things were being bandied about by those 'in the know'. Straker didn't know because he wasn't told, therefore his logic dictated, that as the most senior and experienced pilot in the ISA, he would have been either informed about, or included in, the choice of crews, and at the very least, he would have picked up information on the grapevine had it been related to new Space hardware. He hadn't heard the faintest whisper of anything that sounded like the real truth, therefore nothing special was happening out 'there' that should concern anyone except the auditors.

There were always experiments in the weightlessness of Space concerning genetics and pharmaceuticals, and many involved the biological and fissionable element as well, they had for countless years. As to Eetees, Extra-Terrestrials, he had 80 odd missions to his credit and seen nothing out of the ordinary, he had hoped to make some form of contact with something, there was absolutely zero.

Weapons were a no-no, the ISA was a multi-nation global property, they were still free from use by the Military, and besides, too much of what they did appeared on the NetWide long before it was supposed to, the military dare not use it.

The Space race was no longer, Man had never travelled further than Mars, and even then, he never stayed more than six days, sure, the probes had been further, much further, but only to advance knowledge. The Mars project was nothing more than a glorified morale booster for Mankind, it served no purpose other than to prove that the Martian atmosphere was severe, and the probability of colonisation was only to be found in science fiction, not scientific fact. The Moon had never been colonised as such, there was a large scientific and mining station built on the surface, but that had not been occupied for over 200 years since it suffered a decompression event that resulted in the total loss of life, it was never reused.

As to Space Stations; there were several built, but at the time there was no way to protect them from all the Space debris, a fair chunk of this was man-made and quite large, the bits that were not man-made were the biggest worry though, much of it was so small you could not detect it coming, only discover the damage it caused. Most Stations were dismantled, the rest crashed once the orbit deteriorated, but now, with the advances in materials and force field manipulations, the safety aspect would be greatly improved.

The old days, of which nation was to be first to do what, had long been replaced by 'what can we learn if we get all the smart guys in one place and solve the Global puzzles, so, the World Science Council was formed. It worked well enough, but it did mean that the worlds best were spirited away from their homeland before any national problems absorbed them.

A joint effort in mastering the intricacies of Space and its difficulties was once again a relatively new thing; it was only some 75 years old. In that time, little had actually been accomplished that was not already known, the equipment in use was not much different than was used in the mid-21st Century. Then, travel into Space had been too expensive to afford, now, the natural materials required to build the ships was too expensive to mine; unfortunately, most of it was underwater. It was only recently that the brain pool had determined that perhaps some of the problems of Mankind could be solved in Space, so, many of the old experiences were utilised, like the technology. Considerable portions of it were thought to be too old to be of use, but as it turned out, much of it was quite appropriate. Many of the old designs were used, and very little was changed, partly, because the technological advancements were never achieved, but chiefly, because they were not required to be. There were new materials used, the old tech Space Shuttles, as they were called, were white to reflect light and keep the craft cool, the new ones were black, to absorb the solar light and radiation, this was used to power the craft in Space. The old ceramic tiles were replaced with a silicate and carbon-carbon alloy that not only had greater strength, but had solar power generating properties too, and there was a crystalline silicon coating to give a seamless covering that created far less drag on re-entry. Whilst new technologies were incorporated, it was deemed safe to use the old fuel systems, nothing new had ever been developed that worked better, this was not welcomed, it was still viewed, by an uninformed populace, as an unwelcome pollutant. It was these old type fuels that were still seen as the near downfall of the whole of Mankind in the first place, and

they were to be shunned, despite the fact that the main ingredients of the system were a very natural nitrogen, hydrogen and oxygen, it still led to many a protest.

The new design RSV's were slightly different, using pressurised liquid propellant to get them off the ground, and a relatively new Ion drive to power and manoeuvre them in Space, it was still the misconception of the pollution aspect that made the whole of the Space program unpopular to the global masses.

The program of flights was rarely built up into a wondrous event as in the days of old tech, often the TV news would report it, but normally after the fact, today was different; there was to be no coverage at all.

The global situation was worsening, it seemed unthinkable that the planet was in this current state of high tension, Mankind had managed to resolve their differences peacefully in the recent past, and would hopefully do so again, the mediation teams from the World Council (WC) were in various places trying to resolve local issues for the benefit of all, and by all accounts, not having much success.

The WC was a governing body of elected members from every nation, its job was to resolve issues using the resources at its disposal, this being the member nations fundamentally helping each other out. The basic principle was simple, someone somewhere had the solution to another nation's problem, and with a bit of diplomatic manoeuvring a deal could be done, a crisis averted, and perhaps, a potential conflict resolved. Lately, though, it wasn't going well, reports suggested that frustration was getting the better of those in need, and those with the solutions were also irritated at the demands, what they were looking for were requests and concessions.

Not only were several member states not cooperating, but several were also busy posturing, and a few were busy warmongering.

As the old expression went, it was all about to kick off.

Straker walked to the gantry elevator, his in-flight pressure suit already making him uncomfortable, the ground crew brought the rest of the trimmings, his helmet and gloves, the armed guard detail brought the briefcase with this missions' specifics. As yet, the flight plan was unknown to Straker, this puzzled him greatly, though, if the truth were known, it really annoyed him, he hated mysteries and surprises.

As he backed out of the elevator the senior guard thrust the battered silver briefcase at him saying smartly,

“You will receive instructions.”

The ground crew, bar the helmet carrier, also left.

Now, the digital wall-mounted clock in the elevator showed the local time as 12:55, Straker had already been awake for hours since getting the flight 'go' call. As the elevator engaged and he went up, he smiled, distrusting the briefcase and wondering on its contents, he already had some time to reflect on the scant bits of information he had just been given, not much actually made sense though.

The rest of the crew were aboard already and had been for some three hours, the passengers were all on board too, no more were expected; the sizeable cargo holds were absolutely packed full of crates of who knows what, all packed hurriedly over the last twenty-four hours, and still he was not told of the parameters of the mission.

What would have made this flight so TV newsworthy pre-launch, was the information that all three serviceable ships were to lift off today, something that had never been done before.

At the briefing, Straker was not allowed to ask questions, the one man at the table in the mission flight room was a high-ranking military officer from the UFA Combined Services HQ, he promised that the mission was not of military or strategic value, but still it had a Top Secret classification on a need to know basis, and all he needed to know would be given to him in flight.

“Convenient that,” voiced Straker at the time,

“an RSV is not something you can stop and get out of if you don't like it, once you're in, you're in for the duration.”

There were a few things about this mission he found disturbing, like there was no set lift-off time, just sometime today, there was no scheduled in-flight time, there was no set landing site instruction either, food provision was not large which would indicate a short flight, but the lack of fixed landing instructions would indicate a long flight based on past experience. The amount of equipment loaded aboard would also indicate complex testing or experimentation, this takes time, something the food quotas loaded would not allow. There was the added option of three craft full of equipment, a limited passenger list, and still not enough food supplies for a long experimentation time, and it would seem, given the weight of the packed equipment boxes, there were not enough people to complete any experiments or testing.

Although some things were starting to add up, the complete answer was always missing, as he was thinking about possible solutions to the questions, the briefcase fell over, reminding him of the fact that all the answers he required were contained within its locked confines. He also realised that the reason the briefcase had fallen over was that the elevator had stopped, time to get aboard his ship; time to get his act together, time to start the long and seemingly never-ending pre-flight checks.

Straker looked into the brightly lit interior of the RSV door, collected the all-important briefcase, thought about how he hated surprises, accepted his helmet and gloves from the man in the surgical type clean suit and mask, and stepped out of the confines of the elevator cage. He pressed the big blue disengagement button on the console of the elevator with his elbow as he passed it, nothing happened as he knew it should, next, he put his gear down on the storage platform inside the craft's doorway, then closed and sealed the airlock door. Straker heard the lock thunk into place, the door seals engaged, and there was the hiss of the compression seals, only then did he hear the crew gantry pulling away from Ranger One's side as it was supposed to. He picked up his gear once again and climbed the short stairway; it was awkward with everything he carried, and he had some difficulty entering the numbers on the security keypad to unlock the electronic door outside the pilot's cabin. There was a raised floor ladder you had to use, as the craft was pointing skyward you climbed up everything. He entered the cabin proper and was greeted by his crew, they were already strapped in their seats, helmets on, though unlocked, ready for take-off. “Hello Commander,” they almost said in unison.

Straker replied with another old tradition,

“Well, it's a nice day for a joyride.”

John Williams, his co-pilot, turned, and smiled,

“I see they dragged you out of bed early this morning as well Jeff, nice of you to finally join us.”

Straker just grinned and said nothing; instead, he spoke to the Chief Technician, David Davis,

“Well then Cats Eyes, what have you done about getting this lovely lady off terra firma?”

Davis was their resident computer and electronics genius; he had, on various flights, got them out of some serious trouble by making what he called 'minor adjustments' to the onboard computerisation, it was true that much of the new tech programming needed work; even after 75 years, it was still a work in progress, sometimes in flight and on the spur of the moment.

“Well Jeff, while you have been swanning about port side, we poor souls have already done all the pre-flight checks, and because we are so good, and we know how fussy you are, we did them twice.”

Straker said with mock disappointment,

“Don't you just like spoiling my fun, you know how I look forward to the PFC's.

Well, is anyone going to tell me what's going on as I do not have a clue, but, I do have a football, this, I am assured contains all the answers, but,” and he paused for effect,

“I'm not allowed to open it until I'm told to.”

He looked around the small cabin and his three-crew team all shook their heads. The briefcase was often referred to as the football, it had always been that way since the early days of the first nuclear age, then, the president of the UFA, then called the USA, would always have near him the briefcase with the missile launch codes. You never dropped it; never let it go, apparently just like the old game of football, to lose or drop the ball was not a good thing! No one had seen a football for several hundred years, so the analogy was a little odd, but, perhaps appropriate for the day, everything was odd today.

Jim Curtiss the ships Chief Engineer spoke for them all.

“We all assumed that you volunteered us all for some gung-ho top-secret mission, to once more go out into the Deep and save the human race from shooting itself in the butt.”

Straker shook his head,

“Oh no, you are not going to pin this one on me boys, I am just as in the dark on this one as you are, until someone gives me the clearance and authorization to open this case, I don't have any ideas as to what we are doing, or where we are going, whether this is a joyride, a freebie, or a govspoon trip.”

A joyride, of which there were several types, was simply a trip to the Moon and back, the most common these days were prize winners in the various state-sponsored draws, the first prize was four seats on the RSV, 35 States, 140 seats available, and it produced some very rich people, you could not get a seat unless you had a winning

ticket, but you could sell one or all the tickets for a lot of money. A freebie was the term given to flights in which all the passengers had not paid for, nor won, tickets, often, there were experiments performed at the same time, paid for by some private business to offset part of the cost. On these trips, half of the passengers worked for the Space Administration, the trip being a gift or reward for services rendered, the other half were Contractors, friends or relations, home, and sometimes foreign, Government officials, and the occasional celebrity or three. A govspoon was simply a government-sponsored trip, a government paid for the whole trip which was specifically of a non-military nature, often a scientific evaluation of some equipment or technique, done in the non-gravitational atmosphere of the RSV. Of the three, this was the most uninteresting, the crew were not allowed to observe the goings-on in case security regulations were breached, of course, industrial espionage was still big business.

He asked for an internal commlink to both Ranger 6 and 7, and was patched into the two commanders, they spoke via an unsecured link between the three craft, the voices were high pitched on the aptly named squawk box, both the commanders asked the obvious, what is going on?

Straker honestly couldn't tell them, he didn't know either.

There was a discussion about the weather, he checked that they had completed pre-flight as instructed and that all their boards were green, they were, they briefly discussed the possibilities of disturbed air for both take-offs after his own craft, and concluded, any disturbance should be negligible with a sufficient break.

The conversation was cut short as the ship's master Comsys squawked into life. "Ranger One, this is Mission Control, is anyone home?"

3. One Up

Straker glanced at the clock as he sat in the pilot's seat, 13:13 local time, he leant forward and plugged in the headset from the instrument console, the voice he recognised.

"Mission Control, this is Ranger One receiving you loud and proud, Charlie, you sound a little stressed, you should learn to relax a bit more."

"Yeah, yeah, I hear you Commander, but I am instructed by the office of the President of the World Council to inform you of several important things."

An instant change of mood, from the office of the President, this was sure to be significant.

"Firstly, Commander Straker, listen up and don't interrupt, you are to lift off before opening the case, the number I am authorised to give you now, for reasons that will become apparent shortly, is, two four nine one, this year's date, the information contained in it is of a most secret nature and must not be divulged to either yourself or the crew until after the take-off. Listen carefully, an emergency situation now exists and your take-off time has been scheduled for nine minutes' time, I repeat nine minutes, not hours, the clock is ticking, for Ranger Six, take-off time is now eleven minutes and counting, take-off time for Ranger Seven is fourteen minutes and counting. It is also put upon me to wish you and the other two crews good speed, and with the hope of the nation, and all of Mankind, I, ...I... hell, I wish this were not true. I have to inform you that at thirteen-o-eight standard time, this day, the eighteenth of September, a weapons strike was launched at the United Federation by the New Middle East. A full retaliatory strike has been dispatched and the WC believes that World War Five has begun. For us here, local impact time is estimated at thirteen thirty-four, and it is as a precaution that this mission is to be launched immediately, just in case missile destruction cannot be effected. It is signed by the President himself, Commander, may your divine being go with you, and may they protect you." You could hear the shock and horror in his voice, no one in the RSV cabin spoke. Straker muttered to himself,

"five minutes since launch, twenty-one minutes till impact. Hells fire, we don't have much time."

He could imagine the calculations being made, targets threatened, damage control requirements, the expected destruction and loss of life calculations, infrastructure impairment projections, response targets, kill ratios, EMP flash protection protocols, he shuddered.

"Oh hell, what have the crazy sons of bitches done now?" came over the headphones. The voice was that of Don Corston, the pilot of Ranger 6. Straker shook his head in disbelief,

“Mission Control, this is Ranger One, your message is received and understood, may I take this opportunity on behalf of all the Ranger crews, to wish you all at Control good luck and hope that all goes well, over. Six and Seven, good luck, and watch out for my smoke, it’s going to get rough. Strap in and let’s light ‘em up gentlemen.” A take-off with a two-hour gap was cutting it fine for air turbulence, but a two-minute window, followed by a three-minute window, was never even thought of as a take-off scenario for the sim machines.

He had no idea if the last of the craft could get off the ground let alone fly in a reasonably good trajectory for a safe exit, and there was also the small matter of a seven-minute window till the first missile strike; some were bound to get through. “Rangers, this is mission control, we thank you for your thoughts and hopes, we pray that all is not lost. My instructions are that conversations are now limited to operational necessity, as soon as Seven has completed SRB sep, we, have four minutes to hit the shelters, and only a skeleton crew remains at their stations.”

“Charlie, for Gaia’s sake tell me that this is a joke, things cannot have gone this far so quick, can they?”

There was almost a hint of panic in Straker’s voice. The answer was one he knew he would never forget for as long as he lived, which may not actually be that long, he dismissed that thought almost as soon as it sneaked into his consciousness.

“Upstairs has checked it out on the direct line, all has been confirmed, the mission is go, time is now T minus six minutes and counting.”

The voice was strained and on the verge of tears,

“Get your crews and passengers secured to their places Commander, pre-flight checks show all lights are green, gantries are retracting, fuel systems show green lights across the board, all systems are go.”

Straker turned to the crew and said simply,

“Frag!”

He checked the passenger cabin monitor, something until now he had not done, and was surprised to see that of the one hundred and forty available seat spaces, there were only nine passengers he could count, plus the two cabin crew.

He thought, “Is this all that is to be saved of the human race?”

Straker cleared his throat and spoke into the intercom.

“Ladies and Gentlemen, may I have your attention, please. I have just been informed by Mission Control that take-off will be in approximately five minutes, this is an emergency take-off, so you must do as the cabin crew instruct you, there is no time to waste, please engage your helmet locks and seat harness now. Cabin crew, you know the routine, today we skip it, just get them tied down and lock yourselves in quickly as this is going to be a close-run shot, buckle up and enjoy the ride.”

It was strange how corny that phrase seemed now.

The routine take-off procedures continued around him as he watched the lights and prayed that nothing went wrong, there would never be a second chance to try again if the missiles hit home soil.

Straker had almost forgotten about the briefcase when it seemed to fall over on its own again, he struggled to climb out of his tilted seat, quickly stowing the case in one of the lockers behind him so that it couldn't fly around the cabin during the take-off, there was no time to open it even if he wanted to. Straker now dragged himself back into the pilot seat and buckled up, the auto tensing system pulled him in tight, the flight suit adjusting for the strain, then he put on his own helmet and locked his visor, the air supply auto engaged.

He rattled off a quick checklist, did his own visual checks and satisfied himself that all was OK, and then simply hoped that the machinery and computronics worked as it was supposed to, if it didn't, then none of them would probably know what killed them.

The biggest comfort, if there was one, was that the computronics, the computerised electronics and its associated operating systems, were designed and built by the oldest Space Agency in existence today, the European Space Agency, it could trace its history right back to its founding in 1975, well over five hundred years without a break, no other agency could do that. It was the only 20th Century agency still in existence, a history it was rightly proud of.

Straker could now feel the familiar pulses and vibrations of the pre-ignition sequence, he had experienced it some eighty times before, his mind at this time, like always, was as sharp as a razor, but there was something final about this flight that he couldn't quite put a name to, but it was there.

Straker's eyes flashed across the mass of dials, switches and lights, he, like the ship, was in auto-pilot, he did things without having to consciously think about it, check a gauge here, flick a switch there, push this, turn that, check it all again.

The tension was the same as always, the adrenalin rush, the only perfectly natural high, was almost overpowering, but he relished it, knowing with complete certainty that if anything were to go catastrophically wrong, there was absolutely nothing he could do about it anyway.

The pulses and vibrations were stronger now, he knew that during take-off the nauseous forces of acceleration over gravity would soon be trying to force his whole body through the chair and into the floor of the cabin, he was about to be acutely sensitised, confused, squeezed, shaken to his bones and confined, yet there was a sense of release, a freedom, take-off really did put your emotional system through the wringer as well as your body, always had, probably always will.

Mission Control was giving the running countdown, good old Charlie was still in his seat knowing that a miscalculation in the missile velocity would bring certain death, but he was still there, that same steady voice.

"T minus twenty and all systems are go."

Straker knew that Charlie shared the same thrills and emotional stresses as the crews did, but never released those emotions until he felt sure that all had gone smoothly, until the risk factors were satisfactory to Charlie, hell, he was going to miss him, and many of the others.

Straker yelled into the mic,

“Gaia bless you, Charlie, thanks for being there when it counted.”

It sounded cheap, but he did mean it.

The voice in his ears continued,

“all lights are green, the boards are clear, throttles up and ready to run, auto circuits engaged. Good luck.”

Charlie’s voice was loud in his ears before the roaring noise of lift-off almost drowned it out.

“Gantries are clear, fuel flow rates are on the level, ignition sequence engaged and running hot, pre-ignition shows initial contact is green, powering up.”

The main engines fired up at six seconds before lift-off, it was enough to make the craft strain at the clamps that held it in place, but it was not quite enough to lift it off the ground. The twin solid rocket boosters kicked in at zero, this gave that extra push required to get it airborne as the clamps released. The noise and vibration were terrific, Straker, like the rest of the crew, was slowly pushed and squeezed into the seats, the force of gravity was being warped by the force of science.

The suits they wore were a great improvement on the 20th Century stuff, the effects of gravitational pressure were still a force to be reckoned with, but not as bad as the pioneers of Space travel had to endure.

Straker still had to strain his neck muscles to see the array of switches, and concentrate hard to focus his eyes on the now bouncing lights; the gauges were unreadable with any accuracy, the vibration blurred the vision, all he could see with clarity were the green glowing LEDs in the pale blue luminescence of the cabin, that was some comfort at least, green was good.

Initially, it was impossible to speak, and the ancient saying was true, in Space, no one can hear you scream, in the early stage of take-off you couldn't make the sounds even if you wanted to, it took around six seconds for the voice box to regain control.

Charlie’s voice was still there, comforting, reassuring, still counting the seconds since lift-off like a metronome, Straker now heard Charlie telling him at eleven seconds that roll was initiated, he heard his co-pilot ‘confirm roll,’ and at eighteen seconds, Charlie confirmed that roll was complete, once again the co-pilot confirming ‘roll complete’.

In a few moments, Charlie would go through it all again with the other two RSVs, talking to the pilots, making his final preparations, and saying his last farewells. The roar was lessening now, a combination of the laws of physics overwhelming the force of gravity, and the fact that you got used to the noise.

Charlie’s voice was louder in Straker’s ears; he could hear that cool calm voice beginning to break.

“Ranger One, go for throttle back.”

Straker engaged the automated sequence with the simple flick of a switch, the engine power was rolled back to some 72% of full throttle, and they passed the Mach 1 barrier, once passed, they could return to full engine throttle up at 104.5%. They were still less than a minute into the launch and Charlie was specifically talking to Ranger One again.

“Ranger One I’m out, passing you to your LLC for SRB separation and ETJ. Ranger One, the hope of the world goes with you, goodbye and good luck, Master Control is switching to channel six, have a good flight, Gaia help us all.”

There was a static hiss in Straker’s ears as the radio went out, in that instant, it seemed that the world shrunk to the size of the cabin, and he wondered if Charlie and the rest of the guys in the room with him would make it to the shelters in time.

He checked the clock again, he could just make out the time as 13:23, thirteen minutes to impact. Straker hoped that the incoming missiles could be stopped in time, he had no idea how many were inbound, but it couldn't be just the one, they would not have launched a full retaliatory strike for one missile.

Oh, man what a mess, where was he going, why was he going?

Why were he and the other crew the only people to leave? Surely the top brass would have secured a place on board this flight, maybe they were not allowed to, hell, not even the UFA President was here, nor any of the senior WC members.

He strained against the gravitational pressure and managed to activate the passenger cabin monitors. The black and white pictures bounced about all over the place and he could recognise virtually nothing.

The new voice of the LLC (Local Launch Controller) was still counting in ten-second intervals, and at 1:43 from lift-off, they were informed,

“SRB separation in Ten seconds from my mark ... mark.”

Straker could hear the countdown and waited for that moment of silence, the brief weightlessness as Solid Rocket Booster separation occurred, then a few seconds later, the sound of the main Orbital Manoeuvring (OM) engines igniting could clearly be heard, or was it just felt, he was never sure. Speed was now around Mach 4, a little over 5,800 kph and some 45 kilometres off the ground, all this in around 123 seconds from lift-off. The gravitational pressure returned with a vengeance and made the whole crew grimace, no matter how many times you experienced it, no one in their right mind could honestly say they enjoyed it.

Onward and upward they went, nobody spoke, there was nothing to say, you had to get your emotions and thoughts in the right place first, take-off did some strange things to a man’s mind at times.

The Chief Engineer, Jim Curtiss, was too busy scanning his dials and gauges to worry about anything else, he was totally focused on his job, Davis, the Chief Technician, was doing likewise, Williams, the co-pilot was thinking about what happens next, and hadn't got a clue, and Straker, he was wondering about that damn briefcase and its contents, and how he hated surprises.

There was the normal turbulent buffeting as the ship tried to thrust its way through the lower protective barriers of the Earth’s atmosphere, nothing to be concerned about, it lasted a few more minutes and at around four and a half minutes, the OM system shut down, then you were running on main engines only. It was only around 95 kilometres before you were truly into the Deep at last, and at T-Plus 8:25, the main engines shut down, six seconds later there was no more thrust, just another three seconds after that ETJ was completed.

The External Tank Jettison simply meant that the main external fuel tank was released from the RSV, you knew it was done as the tension in the seatbelts slacked off a bit. There were the final few seconds of turbulence, and that was it, from being squashed into your seat to complete weightlessness in an instant, it was always unnerving, but somehow, reassuring that you actually made it.

The best part for the crew at this time was watching the passengers on the monitors, several needed a change of underwear, one or two always needed to wash the inside of the flight helmets, messy, and a few always wondered if anyone had heard them screaming for their mothers, there was no operational need for this, but it relieved the tension in the cabin.

The voice at Control had already left them at seven minutes to go help with the other launches, the LLC informed Straker that R6 was up and running, and just before leaving them to the automated system, he told them R7 was lifting off. The Control Staff had very little time to get out of the Control Room and get to safety, Straker still wondered if they would be able to make it at all.

Straker flicked the crew intercom switch,

“Sally, Julie, pressurising cabin now, I trust you girls are OK?”

There was the hiss and a warning beep that indicated a pressurised cabin, and there was the indication that gravity was being generated too, that would take the best part of a minute to fully establish.

It had long been discovered that to work in Space with 0.8 gravity was better, safer, and actually less hazardous than zero gravity. Standard Gravity was 1.0, one ATM, an atmosphere, the Earth standard was measured in lots of ways, but most recognised it as 14psi, slightly inaccurate, but it was close enough. There were also the external gravity field generators that acted like a force field on the outside of the ship, it was perhaps crude, but it could be very effective, up to a point, this also protected the craft from decompression risks, allowing for a pressurised cabin.

The smooth silky voice of Sally Jefferies filled the pilot's cabin, “Commander, it is my duty to report, that despite the lumps, bumps and bruises, everything is fine, pressurisation is now completed, LG is fully engaged, air content is shown as normal, we are running on internal air. We are going to check on our honoured guests now.”

Straker remembered the briefcase, he spoke quickly to his crew, getting them to monitor the Earth transmissions from the launch centre, and the RSV comms, he wanted to know if the other craft would make it through the disturbed superheated air. He unbuckled from his seat and went to the storage locker, and as he activated the door, the briefcase fell out, bouncing on the floor and on to his foot, making him curse. Even in Low G, it moved faster than he reacted, he thought, ‘got to focus’ “It seems that the case has a mind of its own Jeff,” said Williams, Straker just nodded in agreement.

“I hope that Don and Paul make it, keep scanning for their frequencies, they will call when they can.”

He knew the request was superfluous, but it just made him feel better to say it.

“Hell, I pray they can avert this mess and make this whole flight unnecessary.”

Williams paused to study the case Straker held in his hands, it was nothing special to look at, but what it held, probably contained their future, he wasn't sure why he knew that, it was just an uneasy feeling that he had.

"Well, I hope that there is something of use in that case, like somewhere to land this ship. If the balloon has gone up, then perhaps they will have worked out that we can land this RSV on the remains of the polar ice caps; maybe the permafrost will support the weight and we can land somewhere near one of the several observation stations, make some sort of sense of the mess that some asshole has dumped in our laps, and."

Straker cut him short,

"John, we don't know what is going on, if you give me a chance, I can open the case and find out."

The silence in the cabin was deafening as he pressed the buttons on the case, two, four, nine, one. The electronic locks whirred, and then a click suggested it was unlocked. Straker slid the locks open and took out a thick file marked MOST SECRET, as he broke the seal, John Williams was using the zoom facility on the monitors. He zoomed in on the faces of the passengers, they both noticed that they all were mainly middle-aged and professional-looking, and not in the slightest agitated about the experience of the take-off.

A whistle from Curtiss made them both turn around.

"You know who 'they' are, don't you?" he said.

Straker replied,

"I recognise only three, Gordon James, Professor Snowdon, and Professor Markov, the Russian scientist, they are the only three I know, but you, mister scientific journal bookworm, will no doubt tell us mere mortals who the rest are."

Curtiss smiled at Straker's reference to the journals, he had always frowned on his reading of them on his vidbook, it may have had something to do with the fact that he was supposed to be concentrating on his work instead of reading them, but, he continued.

"Yeah, I can enlighten you, General Gordon 'Jessie' James, Chief of the UFA Armed Services, you have Professor Snowdon the solar power expert, most of us recognise Professor Markov, he is a world-renowned Space vehicles engineer, Professor Jones is also a Space engineer, together, they are best known for their satellite design work, then we have Professor Engels, he is the foremost exponent of hydroponics in the known universe, and George Harris is an agriculturist, the world's foremost scientist in soil microbiology and plant genetics. You also have three other masters in their own fields, Professor Burgess, best known in the fields of Microelectronics and nanotech, and Professors Marks and Grenuille, computer systems and medicines respectively, and there you have it; the foremost names in science in the western hemisphere, and most others, all are here aboard our very own floating island."

Williams grinned at him and said,

"Well th-ank you, Pro-fessor Curtiss, what I'd like to know is why are they the only ones here? Surely there should be more people here? You can't restart the Human

Race with these creaky old bones, and I don't think that Julie and Sally would take too kindly to being the mothers of the world to be.”

Straker just tapped the file,

“let's see what this has to say.”

He opened the outer cover. There seemed to be several smaller files within, he picked out the folder marked MOST SECRET and broke the seal, he started to read bits aloud.

“This document is of a Most Secret nature, and by reading it, you are bound by the Global National Security Acts in force at the time of reading.”

He mumbled to himself as he speed read bits, then continued,

“It starts with a listing of the passengers, two appear to be missing, a Professor Jordan who is an atmospheric engineer of some renown, and a Professor Geoff Davidson who is another mechanical genius, designed amongst other things, the roving vehicle which survived the atmosphere on Saturn's moon, Titan, neither of which are on board as we know.”

He paused and mumbled again, his finger zipped across imaginary lines on the page, and he skipped a few pages saying,

“security stuff”.

Then he went quiet; he frowned, raised his eyebrows, and let out a long and slow whistle.

“Well, there's a turn up for the books, at least we now know where we're going, though some of the information is a bit thin.”

“Well then Jeff, enlighten us as to where on Earth we are to land,” said the up to now silent 'cats' eyes' Davis.

OK, that is your three chapter preview, I hope you like it. Depending on the version, the kindle version is just under 500 pages, the printed version (6x9") is around 390 pages, in either case, all full editions are just over 205,000 words.

Orbiter One - At Worlds End, was released in January 2020, to find it and purchase a copy just go to your usual Amazon online store and enter the title and Author name. For the printed version, enter the ISBN number below the title For the Kindle version, enter the ASIN number below the title or simply go to my Author page and you can find it (and all others published) there.
<https://amazon.com/author/cliffdale>

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<https://www.servusadartem.com/wrip.php>

There will be more stories relating to Orbiter One, its beginnings, its ongoing stories and the struggle for survival, you can find these stories, and more information, on the Servus Ad Artem website, the direct link for the Library is below.

<https://www.servusadartem.com/Library>

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More of Phil's work can be seen, and purchased, on his website at

www.trueblur.com

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ABOUT THE AUTHOR

Born in 1961 in London, England, Cliff moved near to Bristol in the summer of '69 and recalls seeing the grainy black and white images of the first moon landing as it happened, it was an exciting time of discovery. He was already an avid reader of Science Fiction by then, and brought up with the excellent BBC TV series Doctor Who, and vividly remembers watching it in black and white in the mid-'60s, (and hiding from the Cybermen behind the sofa!), and, reinforcing the Sci-Fi adventure with other TV series in the 70's and 80's with the likes of Blakes Seven, Quatermas, Day of the Triffids and more.

He left school for college and studied catering, became a chef and worked for the MoD for a while, which is when he started writing just for fun, essentially just scribbles in a notebook (the paper kind), none of which have survived to tell any tales. This book, and the idea for the follow-on stories, originally started in 1980, the outlines for these were done on his Mother's old typewriter, the intention being to write it and hopefully get it published in a few months, or at least within a year, ah, youthful dreams.

There were big plans, it was going to be epic - then love intervened.

He met, and married, Caroline, then it was children (2 boys), next it was a mortgage, then other commitments and new interests. The children eventually grew up and moved out, he moved on to Spain, mainly for reasons of Caroline's health, and there, rediscovered the original typed notes for this book. He set about expanding those notes and little by little the story evolved, and this time on a laptop, far easier than a typewriter!

In-between strolling along the beaches of the Costa Del Sol and days out on the motorcycle, he managed to tweak the book here and there, and, as he recalls, suddenly, At Worlds End was complete. It had taken a lot of time, 3 house moves, plenty of patience from an understanding wife, bucket loads of green tea, and many hours of contemplation with Pink Floyd and David Bowie.

Now, at 58 years of age, he does have a bit more time available, but, as he mentions, not quite as much time left as when he started. There are plans to complete the whole series of follow-on stories that were planned all those many years ago, and a hope that it did not take you as long to read this book as it did for him to complete it.

They are both still on the Costa del Sol enjoying the Spanish weather at the new Finca (house move number 5), with freshly picked and squeezed OJ for breakfast, straight out of the orchard, and at the time of writing this, several other stories are also complete and nearly ready for release, Book Two is in progress, parts of Book Three are also underway, the outlines for Books Four, Five and Six are also well defined, and there will be a Book Seven and possibly a Book Eight, but that is, as they say, still yet to be determined.

Released around the same time as this book are two others, both part of their own series, The Genesis of Capsaa, and Anecdotes of a Zero, if you liked this book, then perhaps you will be interested in the others too.

Anyway, enough of this waffle, Cliff hopes you enjoyed the book, and perhaps you will come across Book Two (Silent Night) soon, and who knows, the rest of the series in due course.

(January 2020)

OTHER TITLES

BY THIS AUTHOR

Orbiter One (series)

Book 1 – At Worlds End (January 2020)

ISBN: 978-84-09-18312-8

Capsaa (series)

The Genesis of Capsaa (August 2020)

ISBN: 978-84-09-22483-8

Anecdotes (series)

Anecdotes of a Zero (May 2020)

ISBN: 978-84-09-19930-3

Breaking News (July 2020)

ISBN: 978-84-09-21928-5

More information about these books can be found here

<https://www.servusadartem.com/Library>

 *Cliff Dale*