

A short Overview of the Federated Districts of Ceres

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Figure 1: Flag of the Federated Districts of Ceres

The Beginning

The first beginnings of the Federated Districts of Ceres were laid down in 2016, when German Deutsche Rohstoff and the French Imerys mining companies joined into the asteroid mining joint venture Euro Asteroid. After developing their own asteroid mining technologies and beginning operation on 3753 Cruithne, the company began to eye the more distant, but also larger Main Belt.

After starting mining operations on 170 Maria and 1272 Gefion, Euro Asteroid began to consider a larger operation on Ceres, after a survey discovered the surface regolith of the body not only contained large amounts of water ice, but also a surprisingly high content of Helium 3. This made Ceres a high value target for mining. Additionally, the rocky core of the planetoid potentially contained other high value materials useful for construction.

With the European, American, Russian and Chinese Mars colonies growing, the scientific interest moved to the Asteroid Belt, after it was discovered that 951 Gaspra had already been mined by unknown aliens, thought to be either the Quetzal or the Ziggies. The 2034 discovery of intelligent life in the sub surface

oceans of Europa and the subsequent contact with the Europeans¹, economic interests began to shift towards the Main Belt and Jupiter and Euro Asteroid began to equip an expedition to Ceres.

However it was the recently formed Federation of South East Asian Nations (FSEAN) that made their first moves to Ceres, attempting to build up a settlement according to claim Ceres according to the Beijing Space Settlement Accords of 2019. Several FSEAN build spacecraft made their way to the asteroid in 2032, but sloppy planning and execution of the mission, forced the crew and settlers to return to Earth after landing a single lander on Ceres.

Euro Asteroid plans for Ceres however were much more sophisticated made it clear that any mining base would require a large population of employees to supervise the mining as well as the refining equipment and handle eventual problems with either. With additional support personal for these technicians, including administrators, cooks and entertainers, the potential population of the Ceres facility would be larger than any of the previously build facilities had been, as Euro Asteroid took the growth of the facility into account. To handle the projected population of up to ten thousand employees for the first ten years, Euro Asteroid planned to use a 500 meter Stanford Torus style base, docked to the surface of Ceres. The Torus itself was designed and constructed in Parts by Hochtief Orbital.

This initial Euro Asteroid expedition to Ceres was carried out by ten cargo spacecraft that transported the parts of the Torus, produced on Luna, as well as most mining equipment. The target was Asari Crater near the Cererian north pole, where several docking cradles were installed on the surface, followed by the slow construction of the Stanford Torus. Construction of the initial base lasted seven months, after which the first passenger spacecraft arrived with the first rotation of employees, while the construction crew was partly returned to Earth and some remained on Ceres.

During this time the FSEAN protested harshly about the perceived, illegal claiming of the asteroid by Euro Asteroid, even though, according the Beijing Accords, neither nation had been able to successfully claim the asteroid with a permanent settlement. Additionally, Euro Asteroid was building their mining complex as a commercial endeavor, which was not considered comparable to claiming the asteroid for a single nation or super national entity.

By March 2043 the Asari Mining Complex started operations with 2000 employees and began to produce water, Helium 3 and steel. The amount of water and Helium 3 harvested alone made it an instant target for refueling spacecraft en route to various close by orbital targets, like Jupiter and other asteroids. However, the first few years were problematic, with faulty life support systems, mining equipment and two major

¹This refers to the landing of the Europa Express Lander, which was later joined by an European surface probe send up through the young crack in the ice the Europa Express Lander landed near.

hull breaches of the Torus.

Over the next two decades Asari Mining Complex expanded by locally producing a full sized 1.8 kilometer Stanford Torus. Mining operations were extended and bored deep into the surface ice and into the actual rock of Ceres, producing aluminum, titanium and other sought after materials, as well as a larger quantity of platinum group elements. The population had grown to nearly a hundred thousand, with a growing number of employees requesting to become permanent residents of the Mining Complex and Euro Mining allowed families to follow to Ceres, effectively turning the Mining Complex into a full settlement.

Ceres as a European Union Territory

With the first recognition of the Asari Mining Complex as a Settlement by the European Union in 2059, and later the United Nations in 2062, Euro Mining was required to set up a local civilian administration in addition to its corporate administration under European Union law², making Ceres an official European Union Territory under the Beijing Accords, like the Schiaparelli Territory on Mars. While the European Union send a few officials to Ceres to oversee setting up the local civilian administration, most of the new Cererian officials came from the local permanent population.

The FSEAN however strongly disputed the European Union claim of Ceres, but this claim was declared to be unfounded by the United Nations leading to the UN recognizing the European Unions claim to Ceres.

As an European Union Territory, Euro Asteroid surrendered its rights to limit the number of external contractors, allowing other companies and corporations to set up in the Asari Mining Complex and Ceres. Euro Asteroid also lost its rights to limit the number of immigrants, however as the company retained the majority of Ceres industrial capacity and was able to still profit with the construction of additional Stanford Tori for future immigrants.

The first settlement away from Asari Crater was placed in the Occator Crater, near the 'bright spots', one of the prominent features of the Cererian surface, named Brillant due to the closeness to the 'bright spots'. These spots were the results of hydro thermal activity several million years ago and contained sodium carbonate, ammonia rich clays as well as magnesium sulfate hexahydrate, making it a prime spot of mining these substances for industrial applications. The hydro thermal activity had also led to the disposition of organic material close to the 'bright spots', presenting a ready resource for the chemical industry.

The third settlement on Ceres was Zadeni Crater, near the Cererian south pole. The Settlement was named

²This differed from the US and Russian corporate extraterritoriality in space, as well as the close control of the Chinese central governance

Süderbraurup by the majorly German settlers. The area itself became one of the breadbaskets of Ceres, as the population created large cavities in the Cererian ice, where local regolith, treated with organics, provided the substrate for a vast number of edible and non-edible plants, the gravity of Ceres enough to provide the plants with an 'up' and 'down'. Some of these ice caverns were turned into large aqua colonies for fish and shellfish, making them part of the staple foods of Ceres.

With the new settlements the local governance of Ceres was sub partitioned into Districts, with each settlement being its own district, while the Asari Complex retained its overall central governance for Ceres. Infrastructure was set up for travel between the single districts, using maglev trains for personal as well as cargo transport, which was cheaper than the previously used suborbital hops between the ports of the single districts.

Several additional settlements were set up over the next few decades, with the population of Ceres reaching about thirty million in 2123. While most settlers for Ceres originated in the European Union, and some from North America, a portion of the new population was entering Ceres from spacecraft operated by transport companies of the FSEAN, leading to about 7.6 percent of the population being South Eastern Asian origin.

The Federated Districts of Ceres

During its time as a European Union Territory, the European Union had worked to prepare the local governance to fully take over the government of Ceres in a peaceful and democratic manner. In 2123 a local plebiscite was held to determine whether the local population wanted their independence and whether or not this new sovereign nation wanted to remain a member of the European Union as well as the Eurozone.

The 2123 Plebiscite was with 68 percent in favor for independence, 56 percent for retaining membership of the European Union and 52 percent in favor for remaining a member of the Eurozone. With this result, the local governance began to work on a Cererian constitution, as well as the basic law texts³. Large parts of the Cererian Constitution were copied from the Federal Republic of Germany, mixing it with French and Nordic ideas.

The new Federated Districts of Ceres was to become a federal parliamentary republic with a Parliament of elected representatives as the main governing body and a Senate of representatives appointed by the District governments. Heading the government was a Prime Minister with a cabinet of ministers, and a

³Criminal, civil and similar law texts

President as a largely representational, directly elected office.

The first full elections were held in November 2124 and the first act of the new government was to sign the Cererian declaration of independence in February 2125. The Federated Districts were recognized as an independent nation by almost all Earth's nations, as well as the Marinieris Congressional Republic of Mars⁴. It was not however recognized by the Federation of South East Asian Nations and the Ares Democratic Republic of Mars⁵.

The 2126 Ceres Incident

The declaration of Independence of the Federal Districts of Ceres lead to diplomatic problems. The FSEAN was targeting the Federal Districts, attempting to intimidate the newly independent government. They declined to allow FDC embassies on their soil, while attempting to block any work to be done by the FDC ambassador in the United Nations.

The situation became problematic as fake news appeared on the Internet about apparent mistreatment of people from South East Asian minorities, independently fabricated by sources inside the FSEAN. Some time later similar articles surface in various independent news blogs on Ceres and as an apparent reaction people of South East Asian descent began to protest on one or two Districts and at one time started to fight each other in the corridors, as well as attempted to initiate riots. Law enforcement stepped in however and arrested several of the rioters. The investigation revealed connections to the FSEAN as originators of both the protests and the riots.

While the FSEAN initially pressured some of its neighbors into breaking of diplomatic relations to the Federal Districts, they remained silent for the latter half of 2125. During this time maglev tunnels and communication lines all over Ceres are sabotaged by unknowns, later revealed to be related to the FSEAN.

The reason for this silence became apparent in January 2126, when a convoy of military and civilian FSEAN transport spacecraft arrived at Ceres. While at first it appeared they follow the orders of Ceres Space Traffic Control, they soon diverged from their courses and force a docking to the Asari Space Port. Once docked heavily armed forces left the transports, attempting to force entry into the governmental district, the original Asari Mining Complex Habitat Torus, while powerful transmitters on the spacecraft attempt to block any communication with the rest of the solar system, while the military spacecraft

⁴The MCR was an originally US settlement that successfully declared its independence and retained good relations to the United States

⁵The ADR was an originally Chinese and later East Asian settlement that broke away from the PRC, partly supported by the MCR, but fell under an autocratic government after its hard won independence.

attempt to prevent any spacecraft docked on Ceres from leaving. Additionally, sabotage severed the main communication and transport backbones from Asari to the other Cererian districts. On Earth the FSEAN claimed they had landed forces on Ceres after continued large scale mistreatment of the South East Asian minority and to help reinstate order.

News about the event on the Ceres side leak out however as backup optical cables ⁶ in the transit tunnels between Districts carry the images. Laser communication links manage to bounce the images to Mars, where the Marinieris Congressional Republic in turn transmits them towards Earth and the rest of the Solar System, while the Ares Democratic Republic transmits information showing the opposite of what is happening.

At Asari, the FSEAN forces penetrate deeper into the District, but as the Federal Districts lack a military force at the time, only law enforcement presents any active resistance. And rather than fighting, most of the resistance is through the home advantage, reduced by FSEAN intelligence, by making use of the multiple redundant air tight security and other systems of the District. Lawan Chuthathep, an law enforcement officer of Asari of Thai descent, becomes a hero, when she makes use of fire suppression systems and other environmental system to trap nearly two hundred FSEAN fighters in a corridor where they remain for the duration of the incident.

As the situation in Asari shift towards the local law enforcement, two of the FSEAN military spacecraft fire Kinetic Bombardment Projectiles close to the Asari Mining Complex Habitat Torus in an attempt to force the Ceres government to submit to the invading force. Shortly afterwards, the Cererian Prime Minister seem himself forced to employ the communication lasers of Asari for defense against the FSEAN spacecraft. As these lasers were capable to output nearly three hundred MW⁷, they it was possible to use them as weapons, though Asari only target the heat radiation systems of the invading spacecraft, quickly subsuming them.

Within about two days, Asari law enforcement, backed by law enforcement of other Districts, as well as many private citizens, were able to either drive the invading FSEAN force back into their spacecraft or take over those spacecraft themselves. Meanwhile, half of the FSEAN military spacecraft were disabled by Cererian com lasers destroying their radiators.

⁶Originally this backup optical communication network was designed to keep Cererian networked AGIs alive during network outages.

⁷These 300MW are spread over a large number of transmitters and needed for interruption free communication with the rest of the solar system

The aftermath of the 2126 Ceres Incident

As a direct result of the Incident, the FSEAN found itself a pariah in the international community and the UN imposed a couple of restrictions. However, the FSEAN still attempted to turn around the fallout of the Incident. The Ares Democratic Republic also faced some problems, concerning their falsified transmissions, even though the Ares government blamed several of their own national news agencies.

Following heated negotiations, the Federal Districts released the FSEAN combatants back to Earth in FSEAN transports impounded by the Federal Districts following the Incident. However, the Federal Districts, retained the FSEAN combat spacecraft.

On Ceres, the Incident brought to mind that Ceres did need some form of armed forces, if only to fight back a situation like the Incident. Previously the population and the government believed they would get by with only law enforcement, but the Incident brought their vulnerability to other situations to mind.

Discussions were abound in governmental circles and the population and relatively quickly it became clear for the most part Ceres would only need a space force as well as infantry, based on spacecraft, as well as some Cererian stations and strategic interests of the young nation. For the most part however it was assumed the new Cererian Armed Forces were a purely defensive force, much like the Japanese Defense Forces during the second half of the 20th century. Additionally, Cererian armed spacecraft would take over law enforcement as well as search and rescue responsibilities, not unlike the US Coast Guard.

The formation of the Federal Districts Ministry for Defense was pushed quickly through Parliament and the Senate, as was the request to the European Union to send some advisers to help with the formation of the Federal Districts Armed Forces. The Ministry of Defense began operations in November 2126 under Minister Manuela Dierke.

Non-Human Sentients on Ceres

Non-human artificial sentients have been a part of life on Ceres since the Artificial General Intelligence Project of Alphabet Inc. was successful in 2065 and produced Sage, the first fully recognized sentient AGI. Their number of limited due to their complexity and the expansive necessary hardware and the majority work in network and data related jobs.

The first non-human, non-artificial sentients to settle down on Ceres were Europeans that had been banished from their home communities in the European oceans. Most of these exiles were known to be atheist or had converted to different, sometimes human, religions, while some had worked hard to push through

societal changes in their home communities. Only a limited number of exiles were actual criminals as recognized by human societies.

European habitats were constructed by melting large cavities into the ice crust of Ceres, followed by filtering the resulting water and keeping it heated by utilizing the waste heat of fusion reactors used to provide almost all Cererian power. For the most part, the Europeans were working in the fish and algae farms of Süderbraurup and Nuovo Milano.

In 2132 a Cererian mining/settlement expedition to 846 Lipperta discovered a hundred thousand Quetzal, twenty thousand Turukal and fifteen thousand Ormiold in cryostasis hidden within the Asteroid, who had arrived 3000 years ago. Following negotiations with the UN and the three non-human sentients, thirty thousand Quetzal, ten thousand Turukal and eight thousand Ormiold settled down on Ceres. While the life support systems of Habitat Tori needed modifications to support the Quetzal and Turukal, the Ormiold presented no such problem due to their unique evolutionary history. Additionally, several of the autonomous AGI controlled Quetzal combat spacecraft chose to enter service in the Federal Districts Space Service.

Cererian values

Many call the Federated District to be the central government of the Belt, and it certainly is the major, not Earth based, power in the Outer Solar System. While Ceres is hardly the only independent nation in the Belt or the outer planets, it is the second largest⁸ and certainly has the most soft power, even though its military power is limited compared to the United States or the Peoples Republic of China.

For the most part Cererian values are the same as general European values, mostly due to its very close ties to the European Union and most of the population descending from German and French settlers and employees of Euro Asteroid. Still, Cererians are also what is sometimes called the 'Embodiment of Belter Ethics'.

Cererians put a strong emphasis on education, to a degree where the majority of the population has the equivalent to a Bachelors degree in one or two areas, mostly in practical applications. They place a great emphasis on the community and helping each other out. They are aware of their environment and potential problems in it. Even children are expected to affect light maintenance and repairs of their surrounding, as it is vital for their survival. As such Cererians have a certain paranoia about any life support equipment they cannot see or help maintain, thanks to stories surviving from the early years of the settlement and

⁸The Callisto Free Nation is the largest independent nation in the Outer Solar System in population.

news from other new settlements elsewhere in the solar system.

This can be explained well by the environmental pressures of life on Ceres, where damage and non-functionality of life support equipment may well lead to the death of the total population of a District. The quirk of the Cererian Stanford Tori of providing Earth standard gravity, lead to Cererians feeling somewhat superior to other Belters, who are are only used to partial gravity comparable to Mars or Luna, something that usually surprises Earthers when they see a Cererian walk on Earth or Earth orbiting Space Settlements without any apparent problem.

Cererians are also open and friendly towards any newcomers from outside of Ceres, but expect them to pull their weight if they aim to live for a longer time or permanently in a District. This openness towards others allowed the non-human sentients on Ceres to become sizable local minorities and Cererians themselves.

Economy

Compared to other settlements and independent nations of the Main Belt, the economy of the FDC is robust and does not rely on one or two exported goods to keep its economy going. Instead, the economy can be compared to conventional planet bound nations, in that the economy relies on a healthy mix of raw material export, heavy and high tech industry, agriculture and providing various services.

As an original mining settlement, the main cererian exports are water, helium-3 and various purified metals, however about 35 percent of exports are taken up by agricultural products⁹ which feed about half of the Main Belts population. Cereran exports of intermediate and finished products are dominated by those produced with conventional mass production technologies, with only a tenth of these produced by more versatile fabricator systems¹⁰.

Ceres is also known for their comparably large number of dockyards capable of producing various space craft for various uses, from cheap mass freighters to high tech scientific and military spacecraft. Additionally, Ceres is also the home of several of the main solar transport companies and the FDC government had created legislation to offer tax breaks for transport companies deciding to move to Ceres.

Most of the service industry of Ceres is geared towards supporting large amounts of transported goods as well as spacecraft and as such Ceres is one of the main trading hubs of the Main Belt and the originating

⁹Most of these products are potatoes, wheat, maize, bamboo and fish.

¹⁰Fabricators are the logical end for 3D printer technology able to 'print' any solid in mono-atomic layers with multiple elements. These are even able to produce non-living organic materials. The process itself is slow however and in most cases conventional technologies are faster and cheaper.

point of many Outer System trade routes and even the construction of Junction Station at the Heim-Feynman Limit of the Solar System that is unlikely to change.

Outside of the transport industry, Ceres boasts many data storage centers, most of which are located in deep core shafts to protect them from almost every conceivable accident. During the 2126 Ceres Incident these data centers automatically cut all communication to the outside world and became insulated for the duration, preventing a number of intrusion attempts from FSEAN info warfare specialists.

Demographics in 2176

Population 81543343

Demographics

Ethnicity	Percentage
European	76.5
Asian ¹¹	8.6
American ¹²	8.1
African	3.83
Quetzal	1.40
Ormiold	0.84
Europen	0.50
Turukal	0.23

¹¹Including Oceania and Australia

¹²This refers to the entirety of North, Central and South America