

So/Ac-P1-1a Mu'Klamal - Class Colony

The Mu'Klamal is a colony suited for industrial production. Both civilian and military assets are usually produced here.

About the Ship

The main reason attributed to the design was developed as a means to better adhere to the [Viable Industry Act](#) in regard to planetary industry. As the [Iromakuanhe](#) have a green view of their worlds one of the options for a large industrial base was to take it out into the vast tracts of space within the home system.

Key Features

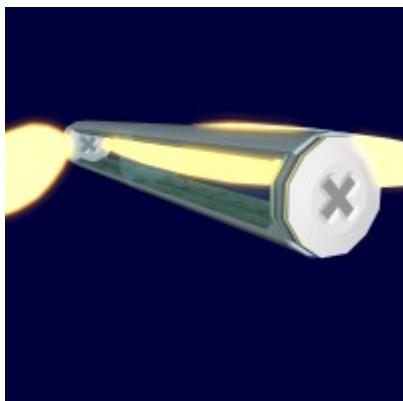
- Homes for colonists
- Near Self-Sufficiency

Mission Specialization

- Generalized Heavy Industry
- Wartime Production

Appearance

The Mu'Klamal appears as a [O'Neil Cylinder](#). It is a large cylindrical structure with six protrusions expanding outward that contain the solar arrays which provide additional power to the colony. The Colony includes a clear view of space for the colonists to enjoy via transparent windows situated along its equator, in addition to the holographically generated sky. However due to the more robust communications and sensing equipment on the colony, it boasts a series of radial antennae to accommodate near constant information streams.



History and Background

Mu'Klamal, according to the Book of Dreams, was as industrious as he was militaristic. The Makuori's first concepts of mass production and assembly came from the iron fist of the Supreme General himself. The Mu'Klamal Industrial Colony reflects those ideals taught in the days of the Makuori.

In modern day [Iruotl System](#), most Iromakuanhe held negative ideals towards mass industry. So in [AR 717](#), plans were drawn up to create a factory system that could handle the needs of a growing commonwealth, but also be nonabrasive to the ethics of the time.

Statistics and Performance

General

Class: So/Ac-P1-1a Type: Space Colony Designers: [Solan Starworks](#), [Ahmida Civiltech](#) Manufacturer: [Solan Starworks](#), [Ahmida Civiltech](#) Production: Limited Fielded by: [Iromakuanhe Astral Commonwealth](#)

Population

- Typical Population: 500,000
- Maximum Population: 1,000,000

Dimensions

- 7200 Meter Diameter¹⁾
- Equatorial Circumference: 26km

Propulsion and Range

- [Sublight/Maneuvering Systems](#): .0125c (~37,474 kilometers per second)
- Range: Mainly Self-Reliant with the exception of building materials.
- Lifespan: The [organoid](#) components of the colony can last up to a century.
- Refit Cycle: Refits are done as necessary.

Damage Capacity

- Hull: 260 (Ship Scale)
- Shields: 276 (Threshold 5/5)

Inside the Colony

Framework and Hull

[Agridinn Frame and Non-Transparent Shell](#)

[ARTC Transparent Panels](#)

[Organoid-type Substructure](#) Highly resilient organoid tissues form the remainder of the body, including an endoskeleton, muscles and primitive organs that perform various functions related to keeping the unit and runner alive. The tissues have exceptional toughness compared to those of normal species, and can even survive in vacuum conditions should the entirety of the upper armor layer be destroyed. Should weapons fire occur inside of the ship, the interior compartments are nearly entirely filled with covered organoid tissues, giving them a high degree of durability versus small arms damage.

Power Systems

[So-P1-G0717 Colony-Class COFU Reactor](#) x2 COFU reactors use advanced space compression to collapse the atomic structure of matter into itself and induce nuclear fusion. They run on a finite combination of tritium and deuterium, meaning that run times are limited. However they are typically used in combination with other power generation means to lessen the burden and decrease fuel consumption when no readily available means of refueling is available upon the colony.

[Ah-P1-G0717 Solar Arrays](#)

The main source of power for the colony are the series of four large solar panels that rotate along the median of the colony to gain optimal sunlight to provide power and reflect it into the colony itself. They're quite large, being 1.3 km in height and 1.05 in width appearing as a set of large sails. Materials used are derived from the Zeinur Solar Disks.

[So-P1-G0717 Capacitor Banks](#) ²⁾

Shield System

[So-P1-0717 Resistor Barrier Shield](#)

Industrial Sectors

Preferring to keep heavy industry off their worlds, the [Iromakuanhe](#) moved such things out into space. Their reasons were due to environmental impact that could occur. And their firm belief that planets are ment to remain as pristine and untouched by industry as possible. They even have [laws](#) in place that prohibit such things and limit pollutant producing material production. Due to some of the more

hazardous jobs being automated, [ANIE type Constructs](#) are typically used to perform the necessary automated functions throughout the industrial sectors.

Molecular Furnace (4)

Dotted throughout the industrial sectors are a several large scale molecular furnaces. Their purpose is to consume and break down materials and converting it to other substances for use in production ³⁾.

Typically finished materials are pressed into thick sheets, or outright blocks and rods depending on the intended use. Once the product is finished they're shipped out all over the colony to be worked either by automated assembly or by [Iromakuanhe](#) crafters of everyday, or artisan goods.

Workable material is usually brought in via several ways. Truck, cargo shuttle, or directly via cargo ship at a docking port underneath a given furnace for immediate use. The furnace is not solely limited to mined materials but also recyclable metals are broken back down to their core molecular structures and reformed back into sheets, blocks, or rods for reuse.

Sea of Life (1)

Are a series of large containers filled with [Prajna](#) that produce [Organoid Components](#) for use in all [Iromakuanhe](#) technologies. Rows upon rows of these tanks lie within a complex and surround by a single tank that is two kilometers in diameter used for the construction of ship-grade organic components. Ships smaller then five-hundred meters are typically produced in one piece with in-organic components installed either as they go or later. Larger vessels are constructed piece meal and fabricated outside of the tank. Failed or recycled organic components are sent through the [Biomass Harvest System \(BHS\)](#) where the materials are broken down, and reused for future production as well as to refresh the Prajna 'sea'.

Fabrication Facilities (5)

Usually controlled by an independent series of [ANIE type Constructs](#), the fabrication bays none the less still require a certain... human touch in regard to current demands being placed upon the bays. The fabrication bays are in effect large automated assembly systems filled with robotic arms containing a multitude of different tools to do their job quickly, and efficiently. Depending on what is being produced, the process can be either two-tiered in construction, or more via several levels of the facility being used to complete it.

There are also conveyor belts and honeycombed walls used to store ready components to be used during the assembly process. The component stores are easily accessible via robotic arms and a series of [Lifter Dollies](#) and [Lifter Trams](#) to ferry goods to and from assembly lines or partially finished/finished goods to their designated pickup areas.

The facilities aren't exactly limited to production of mid-to large units, but can also produce many smaller personal scale goods including various body armors, weaponry, medical equipment, tools and so on in

respectable volume.

Supply Yard (8)

The Mu'Klamal comes standard with a number of supply yards and warehouses to store finished goods and excess raw material for usage in future production. When a ship docks or there is an excess in material they go here via a series of large scale automated or [Iromakuanhe](#) driven [Lifter Vehicles](#) that offload at the yards in an orderly fashion and into pre-assigned sections for each material. More hazardous materials are stored in specially shielded sections and under heavier supervision lest they find their way into the public. The yards are sectioned off from much of the inhabited sections. They include their own security, surveillance systems and fences as a precautionary measure.

Build Time Table

Class	Description	Base SP	Build Time
Very Light	Small Escorts and Patrol Craft	10	4 days
Light	Destroyers, Gunships	20	8 days
Medium	Cruisers	30	12 days
Heavy	Carriers, Heavy Cruisers	40	16 days

Business Park

While the colony itself is mainly dedicated to industrial activity, many companies have placed corporate branch offices in a business park away from the main industrial facilities. The park is located in a relatively urban area surrounded by many trees, flowering plants, and a lake at the center all to break up the somewhat drab aesthetic of the urbanized area even including pieces of modern art with statues dotted throughout. The offices do all manner of business including having shopping floors to purchase products, as well as setup consultations and meetings with business heads. While the business park itself acts just as it implies it doubles as an actual park for colonists to enjoy the scenery and recreational activities.

Some of the more prominent companies include:

- [Solan Starworks](#)
- [Altjira Biomedical](#)
- [Ahmida Civiltech](#)
- [Naryn Industries](#)
- [Sogol Group](#)

Propulsion

- [So-P1-P0717 Sublight Maneuvering Engines](#)

Electronics

LCOMNI

Unlike the tried and tested Fiomni and Icomni construct subtypes, the Life Culture NI, or LCOMNI is still technically in the prototypical phase and has yet to be implemented outside of a few test projects. As they expand out from the [Iruotl System](#), the [Iromakuanhe](#) knew they would need to establish large permanent shipyards and engage in large-scale terraforming of the worlds they will encounter, most of which will likely be lifeless and rocky.

Built from the existing OMNI constructs, Life Culture units would do both and ensure the continued existence of the [Iromakuanhe](#). They are characterized by introspective, but motherly personalities, and have the least erratic and mutable minds among other constructs. Because they operate on large facilities such as space stations, they also have the higher processing power than Fiomni.

Sensors

So-P1-E0717 Colony Sensors Package

Sensor Type	Detection Method/Pattern	Range (Starship) Active/Passive	Range (Powered Frame) Active/Passive	Detectability Active/Passive
Vector Wave Sensors	Spatial Flux, Radial	4 AU / .5 AU	.5 AU / .1 AU	Active Only
Subspace Mass Sensors	Mass and Movement, Radial	6 AU / 1 AU	2 AU / 1 AU	Active Only
LADAR	Laser, Directed Area	400 000 KM / 300 000 KM	200 000 KM / 150 000 KM	Moderate/Low
RADAR	Radio Waves, Radial	150 000 KM / 50 000KM	75 000 KM / 25 000 KM	High/Moderate
MASC Particle Scanner	MASC -Enhanced Particles, Directed Area	8 AU / NA	6AU / NA	Very High
Thermal Sensors	Heat Signature, Directed Area	2000 KM	500 KM	None

Communications

So-P1-E0717 Colony Communications Package

Communication System	Type	Broadcast Pattern	Range	Detectability
Laser	Visible EM	Directed, Requires Line of Sight	400 000 KM	Low
Radio	Visible EM	Radial	175 000 KM	Medium

Communication System	Type	Broadcast Pattern	Range	Detectability
Microwave	Microwave Emissions	Directed Area	350 000 KM	High
MASC-Assisted Laser	MASC-enhanced Laser	Directed to Point of Arrival	20 LY	Low/Medium
MASC-Assisted Radio	MASC-enhanced Radio	Radial from Point of Arrival	20 LY + 155 000 KM at Point of Arrival	Medium/High
Fiber Optic Network	Wired Visible Light Pulses	Point to Point Wired Network	Limited by Network Size	None

Habitat

Dreamer's Chapel

A modest building of glass, chitin and stone, it still engenders majesty in its own right. Typically one would see such a sight upon a colony, or within a small-to medium sized town or city when a cathedral is simply too large to be accommodated but no less impressive despite the differences in size. The Stewards, and [Guard Priests](#) who run them, leading those in attendance in their prayers to the sleeping Sand Dreamers of the [Vigil](#) in helping to uplift the spirits of the down-trodden masses, as well as steel their faith should it begin to falter not only in themselves, but those around them and the slumbering [Saints](#).

Statue of Mu'Klamal

Within the confines of the chapel is a centralized statue within of the lobby of the patron saint and namesake of the colony class, [Mu'Klamal](#). The statue is rather large, hand-cut and carved from white stone showing the Makuori Saint within the confines of his armor. The armor itself looks somewhat menacing due to the air of anonymity and nearly seamless, fluid cast of the armor's joints and overlapping plates giving it the overall effect of a second skin, the helmet is a singular piece, slightly swept back with a flat top and swept back protrusions for the horns.

The face itself contains four slits for sight which glow an ominous red that also sets off the bright and polished amber stone set right above the eye slits. Around the shoulders of the statue is a cape of pristine white clasped about the neck of the armor by precious metals. The overall appearance is of one not of a man, but simply a living suit of armor radiating a commanding, intimidating air about it.

The story of Mu'Klamal is one of remembering one's self in the face of that darker side within everyone, and to master it before it masters those who slip within that dark place. The statue is a reminder of this, of his story, as well as honoring a Saint who in his own right did many great things, some terrible but, great things. The statue itself serves as a visual aid to remind those who set foot within the chapel of his story and the possibilities of what could come from their own darker emotions.

Transportation

Transportation is usually carried out via a automated mass transit system provided for the colony. However, many civilians still use their own [private vehicles](#) to get around as sometimes the transit system may become crowded, or is found undesirable.

Commercial Districts

Through out the colony are a series of commercial 'districts'. Due to the nature of the colony fresh products are shipped in as needed and quite rapidly. Each of these districts can be near town-size or smaller depending, and also include [Iromakuanhe](#) run artisan craft shops and stands that charge a little more then a bulk retailer due to being hand-made. It is also even possible to find small fairs to show off one's prowess at their trade or an open market for produce and textiles.

Many food carts, stalls and restaurants dot each district ranging from low brow to high class cuisines uniquely tailored to each colony. Some are owned by mega corporations such as fast food chains while others maybe family owned and operated or a small chain of businesses.

Housing

Housing proved to be no problem and ranges in in size and variation quite drastically. While personal homes may cost more due to the use of space for a small family vs say an apartment complex or building it is all still very affordable and safe. You will typically find residential areas around the business sectors, and away from the industrial complexes leading to the appearance of a well to do city or large town. Such things are a common enough occurrence, and are kept in relatively peaceful and kempt due to automated systems as well as on site personnel who attend to such things. It is not uncommon for buildings to have rooftop/community gardens or the occasional creeping vine and moss upon them for a more rustic feel as well.

Rural Areas

In the rural areas afforded to the colony, much of them are used to grow foodstuffs in a bid of self-sufficiency which are also supplemented by large-scale hydro and aeroponic farms where they also help in the reduction of CO2 and increase oxygen production. These range from purpose built production facilities, green houses and even large scale farming ventures depending upon the colonists who live in the area.

VANDR Garrison

Like all colonies the Mu'Klamal has its own policing forces. However, due to the innate nature of the

colony the [Astral Vanguard](#) station a token force on site. This is to serve as an exterior guard in case of pirate raids, patrol of the area and to better secure military and civilian assets that may be under construction in the outer reaches of the home system. The facility is segregated from the main community with their own 'fort' of sorts. Included are their own private launching bays for space excursions, landings; resupply. On hand each facility usually comes with a compliment of three hundred to eight hundred personnel which include support staff, reserve frame runners as well as infantry. In case a [Erla VANDR](#) is required within the colony it is fully capable of entering via an overhead shutter system that can open to allow a direct VTOL or by simply walking out of the holding facility.

Life Support

The Mu'Klamal's life support functions are tied in directly with the [Organoid](#)'s natural bioelectrics and life functions, meaning that should power failure occur, these systems will continue to function until the components expire.

[So-P1-V0722 Organoid Internal Life Support](#) Life support systems are enabled via a combination of potent thermo/photosynthetic reprocessing of air, allowing the organoid to feed itself while producing breathable gasses for the crew. This is done by drawing light from the nearest star, or absorbing heat and radiation from the various compartments of the colony, including the reactors and inhabited regions of the colony. It may also deploy small antibody-like drones to neutralize vermin and naturally search out and sequester harmful substances and antigens inside of the ship's environment.

Vehicles

- (16): [So-M1-1A Erla VANDR](#)
- (200): Various Shuttles including the [So-T1-1a Waka class Shuttle](#)
- (30): Bulk Cargo Ships
- (4): [Ur Transports](#)

1)

[The O'Neil Cylinder Type was the inspiration.](#)

2)

Hundreds of Zaiflar Capacitors grouped together.

3)

One example being, 100 Tons of Iron and Carbon being brought in and 100 Tons of steel being pumped out.

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