

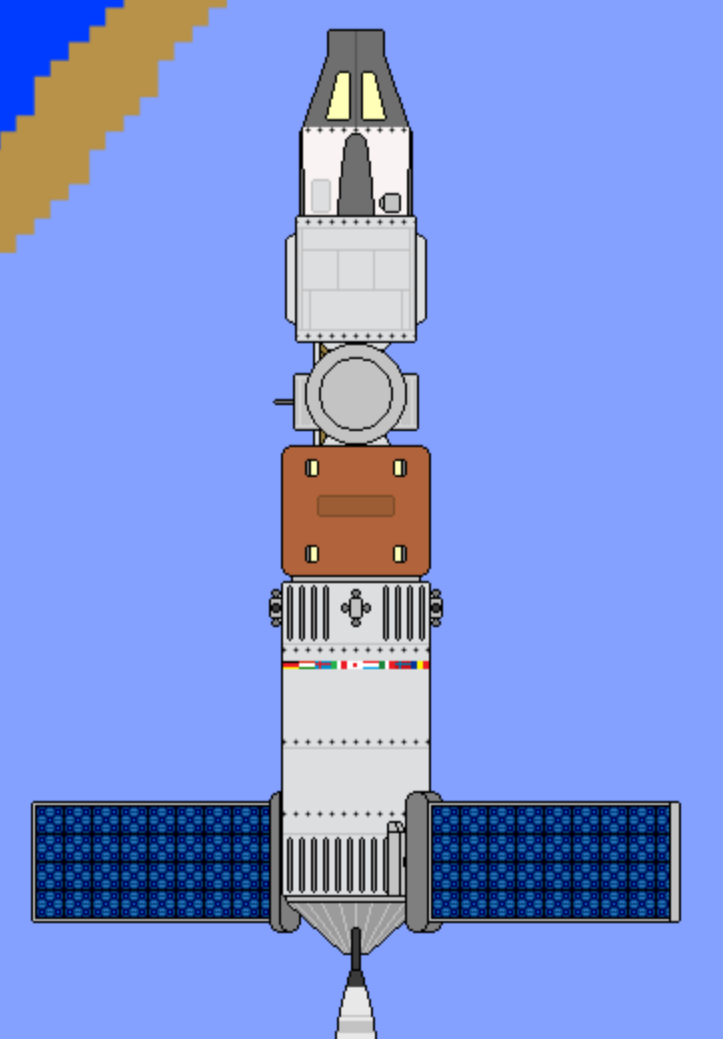
DYNAMICS'

STAR FLEET

STARSHIP RECOGNITION MANUAL

REPORT: ARES

MISSION SPACECRAFT





FORWARD

My contribution to this project would not have been possible without those who came before me. Mainly, CaptShade, whose original drawings laid the foundation for my work by providing me the figurative and literal tools for my own creative output. Nichodo, who was a big help in creating aft and ventral views of various components. RevancheRM, whose ideas and drive helped me get a little more creative and better at something I really enjoy. And, most definitely, Neale "Vance" Davidson, whose enormous volume of work got me interested in doing this in the first place, and for inspiring us all.

- Adrasil

First, as always, thanks to Adrasil. Since partnering with him, I've taken some great artwork and added some context to it. He's really allowed me to scratch my writing itch, to the point it sometimes bleeds, but still feels Oh-So-Good. Next up, of course, is Timo Saloniemi, who's work I've been following for around two decades and I greatly respect. The artwork in these "Starship Recognition Manuals" are 97% based upon the ones he describes textually in his grand opus, the "Hobbyist's Guide to the UFP Starfleet and Its History," and 3% derived from what he has inspired in us.

- RevancheRM

Additional reports may be found at: starshiptracker.com/deltadynamics

CREDITS

ADRASIL: All imagery (unless otherwise credited)

www.DeviantArt.com/Adrasil

REVANCHERM: All writing (unless otherwise credited)

www.DeviantArt.com/RevancheRM

NEALE 'VANCE' DAVIDSON/JAYNZ: Project & cover concepts

www.DeviantArt.com/TFVanguard

Jaynz.Trekships.org

STAR TREK DESIGN PROJECT: Source of sponsor icons

www.StarTrekDesignProject.com

TIMO SALONIEMI: Author of "Hobbyist's Guide to the UFP Starfleet", the inspiration for these SRMs. A direct link to his Google Drive may be found on most deviations in

RevancheRM's gallery.

CREATIVE CONSULTANT: Rahadyan Sastrowardoyo

ARES SERIES:

- Original inspiration from: Star Trek: Voyager ("One Small Step")

- Incorporated parts from: CaptShade

NOTE FROM THE WRITING EDITOR

These ships do not always exactly match the specifications Timo provides in his technical section for each class, as I've adapted them in ways that allowed them to fit a bit better with the guidance provided by the starship construction rules in Steven Long's "Spacedock". I've also changed some dates around when I found them in conflict with other information Timo has provided. These two books greatly inform my own alpha-canon and I urge you to look up both online, as offered free by their respective authors. (Links to both are provided on the Delta Dynamics site.)

Delta Dynamics' Starship Recognition Manual, along with the Reports and all other similar publications released under that branding, are released as a public service to familiarize interested beings with the historic starship designs and technical developments of the United Federation of Planets Star Fleet, its member and preceding services, and those services of regional galactic neighbors. Despite the occasional presence of a sensitive nature of both those historic events and technical matters discussed herein, the distribution and handling of this publication has been ruled Security Grade 0 (Unclassified) by Star Fleet Support Operations, Office of Security.

Copyright 2422 by Delta Dynamics, Wellington, Earth.

Memory Terra/Memory Alpha Cataloging Data: UFP ITP/TE 7259381460304

Under the laws of the United Federation of Planets and its members, use or reproduction (in whole or in part) of the information contained in this publication—along with proper attribution of its source—is granted. This edition is authorized for distribution only in member star systems of the UFP its territories and possessions, affiliated star systems, and select independent or neutral star systems. "Star Trek" and all related likenesses are copyrights and trademarks of Paramount Global. This publication has been established for informational and entertainment purposes only. No infringement of copyright nor trademark is intended. We've both been...pretending too long.

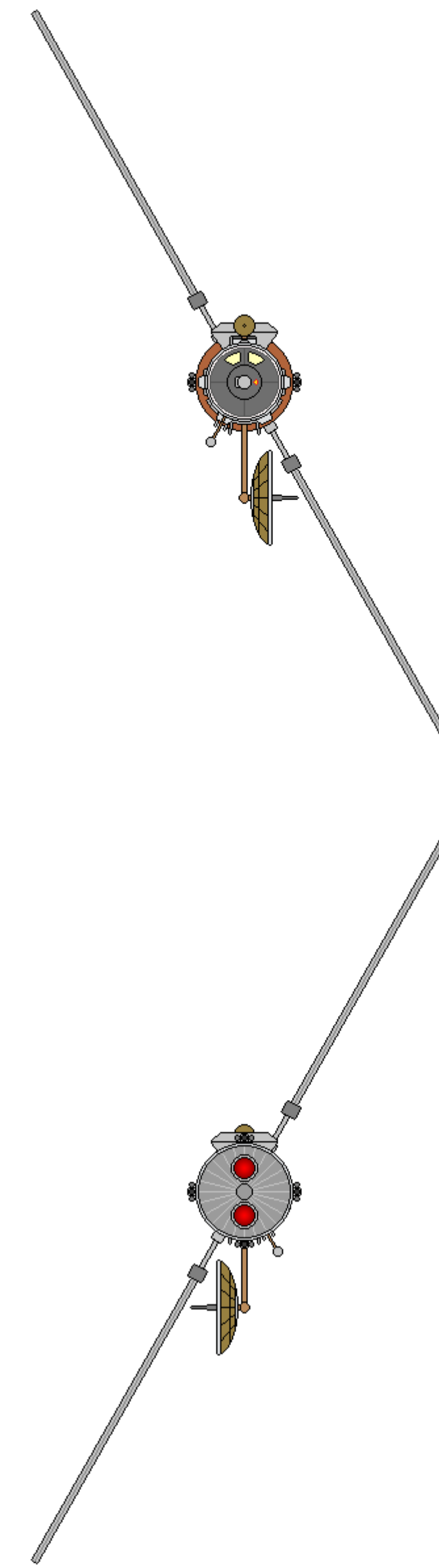
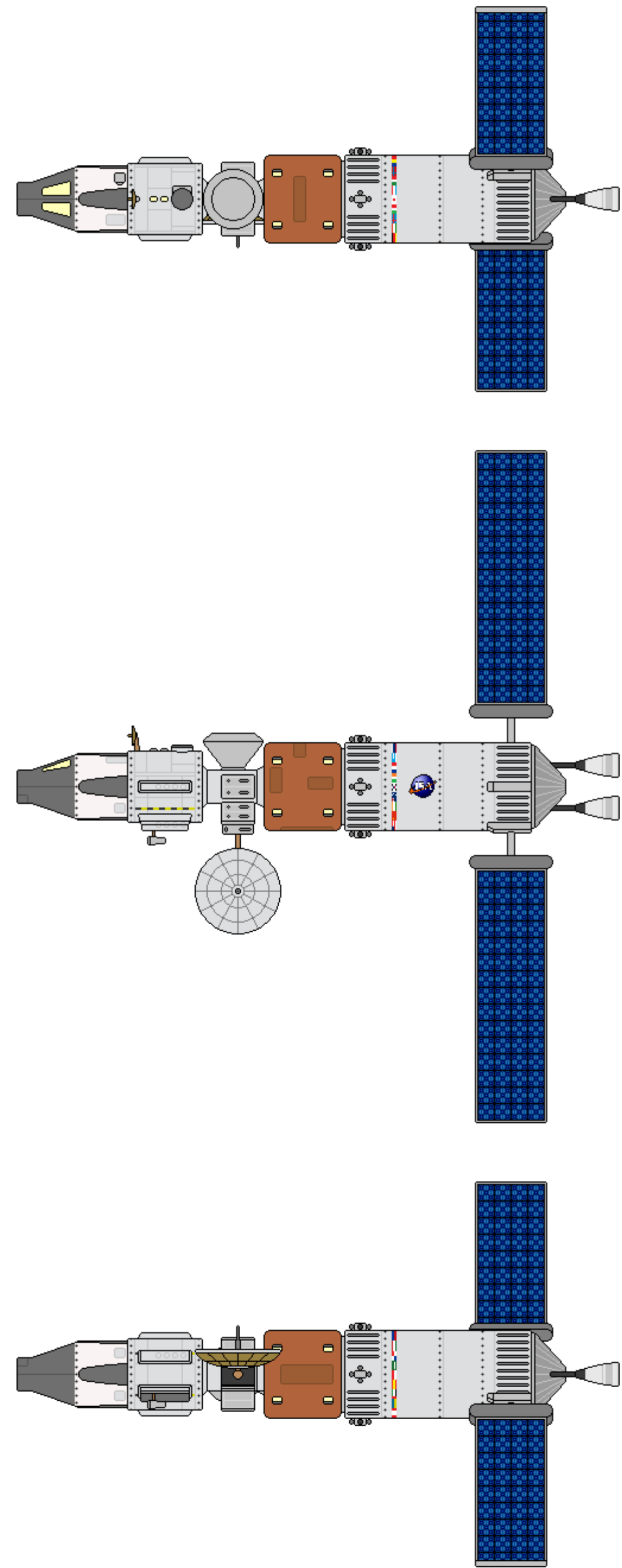


CONTENTS

ARES	MISSION SPACECRAFT	PG 02:01
CLASS TIMELINE		PG 03:01
SHIP COMPARISON GUIDE		PG 03:03
GLOSSARY		PG 03:04
SPONSORS		PG 03:07
OTHER PUBLICATIONS		PG 03:08



ARES CLASS



CATEGORY: MISSION SPACECRAFT
 OPERATIONAL: 2030 - 2032
 CONSTRUCTED: 5

DIMENSIONS:
 LENGTH: 93.2 M
 76.5 (W/O LANDER)
 BEAM: 59.9 M
 16.2 M (W/O PANELS)
 HEIGHT: 104.0 M
 20.8 M (W/O PANELS/POD)
 MASS: 1,350 MT

TACTICAL:
 - VARIABLE EM FIELD

PERFORMANCE:
 MAX: 0.16 C
 ENDURANCE: 4 MONTHS

AUXILIARIES:
 - 1X MARTIAN LANDER
 - 1X ESCAPE POD
 - 1X MARTIAN ROVER (OPTIONAL)

COMPLEMENT:
 CREW: 3



ARES CLASS AUTHORIZED CONSTRUCTION

THE FOLLOWING SHIPS OF THE ABOVE CLASS WERE AUTHORIZED BY THE INTERNATIONAL SPACE AGENCY, IN COLLABORATION WITH THE U.S. NATIONAL AERONAUTICS AND SPACE ADMINISTRATION.

USNS ANHUR (ARES I)
USNS MANGALA (ARES II)
USNS GUAN YU (ARES III)

USNS TOHIL (ARES IV)
USNS ODIN (ARES V)

NOTE: THE SHIPS WERE NAMED AFTER THE EGYPTIAN, HINDU, CHINESE, MAYAN, AND NORSE GODS OF WAR, RESPECTIVELY.

GENERAL INFORMATION

Taking place alongside the ongoing Aphrodite and Aventure programs, the Ares series of missions was ISA's initial (but long delayed) attempt to reassert humanity's presence upon Mars. While there was a general consensus that the planet needed to be revisited, the "when" was up for debate: the fall of the Great Khanate in 1996 certainly resulted in the complete loss of all life on the planet, but there was still concern about (non-evident) automated defenses that might result in a mission loss. After a number of fly-bys by probes reminiscent of the mid- and late-20th century, there was enough interest to finally fund an international effort, though limited in scope. There was considerable concern in expending copious amounts of finite funding on a major effort just to see it fall to Khan's final flails from the afterlife. Instead, a more traditional explorative series of missions would be conducted and then, if those demonstrated mission security, efforts would be re-evaluated.

The joint ISA/NASA Ares spacecraft were, as with the Apollo program six decades earlier, comprised of two primary vessels: one a direct-ascent intrasystem propulsion system and the other the planetary descent vehicle. The first, generally referred to as the command module, was in reality itself defined by three specific modules: laboratory, habitat, and engineering. The lab was the smallest but not limited to simply scientific inquiries, as it had the docking/airlock assembly, orbital mission cockpit, and scientific compartment, with direct access to the data from the externally-mounted LIDAR and trans-spectral imager. Connecting the habitat module to the forward one was the communications trunk, which comprised 95% of the mission's transceivers, as well as the docking port with the craft's sole escape pod. A medium-sized communications dish on a 360/90-degree extendable gimble was suspended on the ventral side. The habitat module had all of the expected amenities for supporting the multiple weeks of round-trip transits, including sleeping & dining arrangements, exercise and medical bays, and shower & toiletry facilities. Bringing up the rearmost section was the engineering module, defined not simply by the two-nozzle ion drive, but also by the two prominent solar panels that served as a secondary means of recharging onboard battery systems. A maneuvering thruster array ringed the section, directly aft of the habitat module.

The second component was a direct relation to the Apollo lunar module, though far sturdier and with the ability to support excursions for up to 6 days (extendable to greater lengths when paired with prepositioned life support hardware). This single-stage Martian Lander also included an underslung cargo bay for a rover or other materials. Sleeping arrangements were recognizable to any user of hammocks on Earth, with rudimentary toiletry (and no shower) facilities. Extended stays would be predicated either on hardy explorers or additional equipment pre-positioned to support the facilities expected, such as laboratory, habitat, and power functions. Generally, the lander was not equipped to transport to orbit any cargo other than the two crewmembers, unless refueled during the surface layover.

The program went operational with Ares I, the USNS Anhur commanded by Verna Mitrios in May 2030. Intending to have human boots on the ground for only two days, the mission was designed to force-test the reliability of a remote crew and their vessel by launching and delivering them when Earth and Mars were on nearly opposite sides of Sol. Though the risk was nothing to dismiss, there was little concern for the mission, as the craft design had decades of use behind it, communication beacons would ensure uninterrupted signals, and the ion drive-while not perfected-was trusted.

Like all such-equipped vessels of the age, the engine's greatest attribute of speed was not in question; instead, it was more of an issue of acceleration. The transit from Earth to Mars, at 376.6 million kilometers, could technically be achieved in just under two and a half hours. Since that would leave the crew as a red paste with a thin consistency on the aft cockpit bulkhead-the inertial dampening field was still 6 years away from operational release-the circuitous route



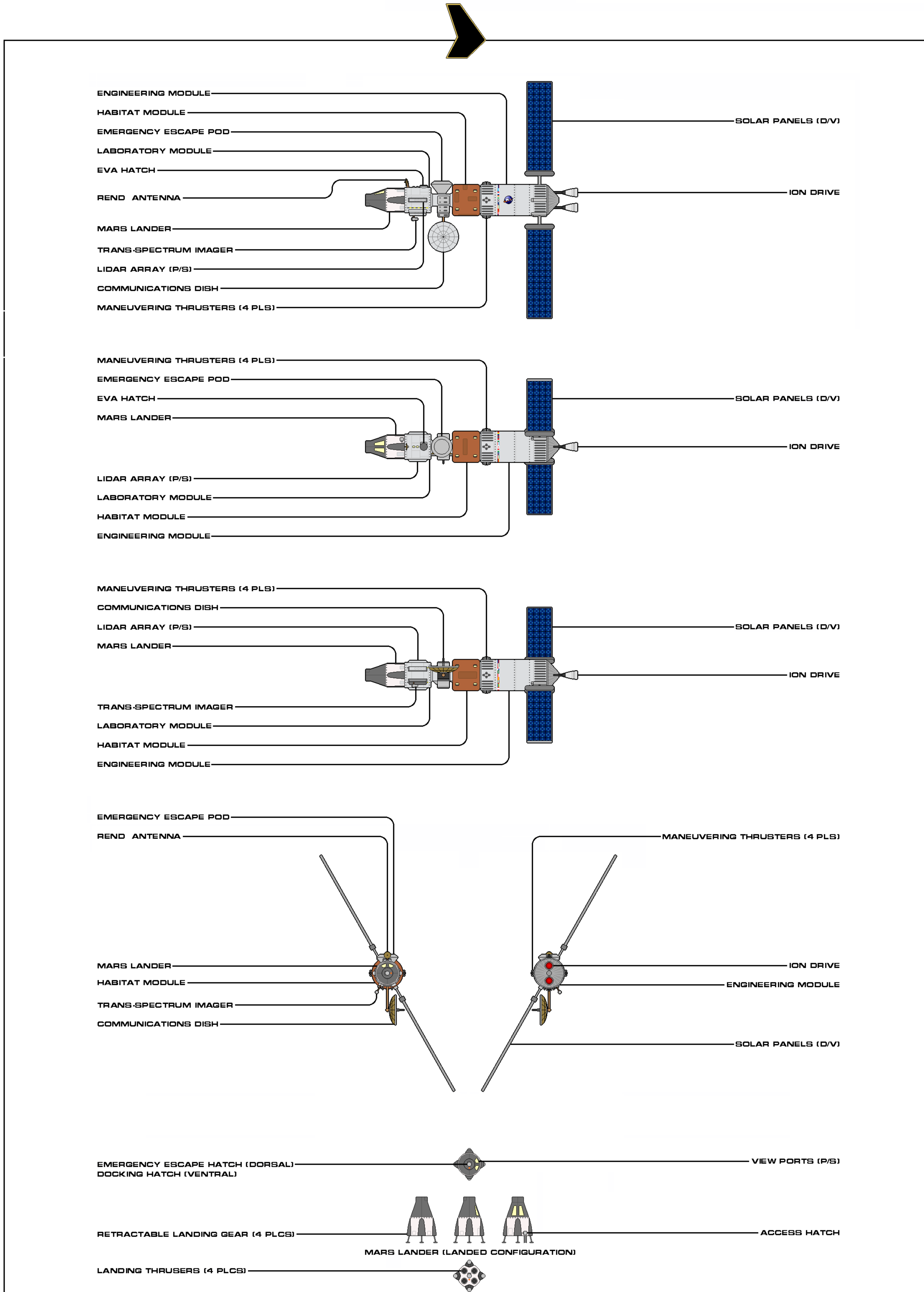
ARES CLASS

GENERAL INFORMATION (CONTINUED)

around the system's star was planned with a transit of 23.5 days. This was for the purpose of steady increases in velocity, so as to not incapacitate the three crewmembers. The effort was an indisputable success, with the famous first-step statement by Mitrios ("In collaboration and peace, Humankind conquers the God of War") broadcast from the surface of the Red Planet to the entranced people of Earth.

Four other missions were already in the development phase when Ares I took off. USNS Mangala (Ares II) stayed for one week on the surface in early 2031, conducting additional equipment function tests. Mid-2032 saw USNS Guan Yu (Ares III) staying for three weeks, presenting and testing base longevity hardware.

Unfortunately, USNS Tohil-Ares IV, commanded from orbit by John Kelly-did lead to a major mission failure, though fortunately not of all hands. USNS Odin (Ares V) was launched early to recover the two planet-side astronauts and though no sign of the Tohil's command capsule was ever found (before 2376), confidence was high that the Augments were not responsible. Following a delay for a proper investigation of all data and telemetry, ISA reported the loss of Ares IV was an "unknowable incident" and cleared the world for further governmental and commercial exploration. (The first colony-defined as a settlement with permanent migrants-would not be founded until 2103.)



SHEET 1 OF 1

CLASS	ARES	CATEGORY	MISSION SPACECRAFT
VARIANT	N/A	CONSTRUCTED	2030 - 2032
LENGTH	93.2 M	BEAM	59.9 M
HEIGHT	104.0 M	MASS	1,350 MT
OPERATIONAL	2	RELEASE DATE	1508.21

Authorized for release by Star Fleet Bureau of Starship Construction



CLASS TIMELINE

1995

The Great Khanate begins construction of a manned base on Mars.

Khan acquires over 200 Soviet-era bio-ready warheads, as part of a doomsday plan.

Muroroa Atoll is attacked by a combined Russian-American strike and is destroyed by a nuclear weapon.

1996

The last of the Khanate's twenty interplanetary missions are launched from Earth, mostly to Mars.

Khanton falls, with Khan Singh and 84 followers escaping undiscovered the next day on a DY-100 they had held in reserve.

The Great Khanate's Mars colony fails.

The Eurasian Confederation, incorporating Russia and former Soviet satellite nations Afghanistan, Kazakhstan, Kyrgyzstan, Mongolia, Tajikistan and Uzbekistan, is founded, in order to combine natural and technical resources and get a foot in the door of the space-faring nations club.

1998

Goddard Moonbase is officially declared ready to begin commercial operations. The science staff expands to some 70 personnel specializing in the fields of space research and industry. The base itself has now grown well beyond its original three geodesic domes, so much that it can now be spotted with telescopes from the surface of Earth.

1999

The Asteroid Belt Lander program confirms what Human space scientists have long suspected: the inner asteroid belt of the Sol system is rich in raw materials, making it a prime source for mining in the near future to fuel Earth's rapid space industrialization.

2002

South Korea alone assists the people of North Korea in recovery.

The United States of America and the European Union formalize an economic and defense relationship with what will be called the Western Alliance by media and opponents.

The Nomad MK-15c space probe, designed by cyberneticist Jackson Roykirk, is launched by NASA.

Construction of Farside Moonbase begins.

2003

The Korean peninsula is formally reunified under a constitutional monarchy established with North Korean expatriate and Kim Jung II daughter, Kim Jung Noe.

The first two Earth L-5 space colonies begin construction.

2007

Tsiolkovskygrad, the first L-5 "space city," is completed and the first 250 residents move in. It is informally nicknamed "New Russia," since the majority of its population consists of Russians and Slavs.

2008

The space agencies of the Western Alliance members agree to jointly conduct the Aventureur space missions.

2009

The Lewis and Clark (Aventureur I) mission launches from Earth, with Christopher, Fontana and O'Herlihy in deep cryosleep.

The democratic nations of Arabia, Palestine, Syria, Iraq and Iran form the Muslim Bloc.

New Constantinople, the second L-5 "space city," is completed and opens its doors. It will become a haven for disaffected Middle Eastern cultures.

2011

The New United Nations convenes for the first time.

2018

The New United Nations creates the International Space Agency (ISA), an effort intended to coordinate combined national space exploration and safe operation and transit of commercial vessels.

2022

The subspace dimension is discovered, though as yet there is no means to tap its potential.

2024

Several European nations, including France, become politically destabilized.

The Bell Riots in the United States, the Neo-Trotsky Movement in Russia, a resurgent eugenics movement in Southeast Asia, and the Avignon Riots in France harken the destabilization.

Ireland is reunified by force.

2026

Factions of eco-terrorists launch a series of attacks that are responsible for as many as 37 million deaths.

Astronomers detect a series of asteroids on a clear path for a near-Earth passage.

Multiple analysis of the threatening asteroids confirms a number of them will collide with Earth over a period of three years (starting in 2031), threatening all life.

2029

Fusion power technology is achieved; work immediately begins to make it space-capable.

2030

The Ares I is Earth's first manned mission back to Mars, since the fall of the Great Khanate.



CLASS TIMELINE

The first successful and controlled matter-antimatter energy conversion is tested under laboratory conditions.

2031

The Ares II marks another return to Mars, to test the viability of equipment and structures for a permanent base.

The Western Alliance, Pan-African Alliance, Muslim Bloc, and a mix of nations from the Far East and Middle East help divert the orbits of a number of asteroids due to impact the planet, threatening all life in Earth. The effort is able to capture six of the fragments, eventually moving them to Earth's L-5 point, where they are eventually hollowed out and converted to O'Neil-style space habitats: Vanguard colony, Colony Roykirk, the Moss-Offenhouse colony, the NicholCorp facility, the Brynner Asteroid, and the Starling Habitat.

Shortly after Earth's cooperative success in defending the planet, most Asian, and many near-Asian, nations formalize their relationship into the Eastern Coalition.

2032

Zefram Cochrane is born in St. Paul, Minnesota.

The Ares series spacecraft Guan Yu conducts the Ares III mission to Mars, the thirteenth successful manned sortie to reach that planet.

The Ares IV mission to Mars fails when the command capsule disappears, stranding two astronauts on the surface.

The Ares V launches early to perform the rescue of the stranded Ares IV astronauts.

2103

The Mars Terraforming Project reaches the end of its first stage. The planet now has a chain reaction system developed that will lead to a breathable atmosphere, although it will remain somewhat dry and cold. Work will continue over the next century to make the climate of Mars more tolerable for humans.

The first permanent settlers of Mars arrive, setting the date of Earth's first off-world colony.

2376

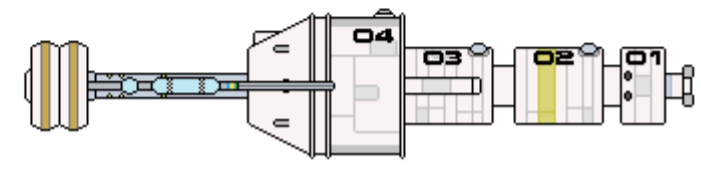
The Ares IV command capsule is discovered adrift in the Delta quadrant.

Two Iconian gateways open up in the vicinity of Carrea and Delta IV, both leading to an uninhabited resource-rich world that both worlds desire.

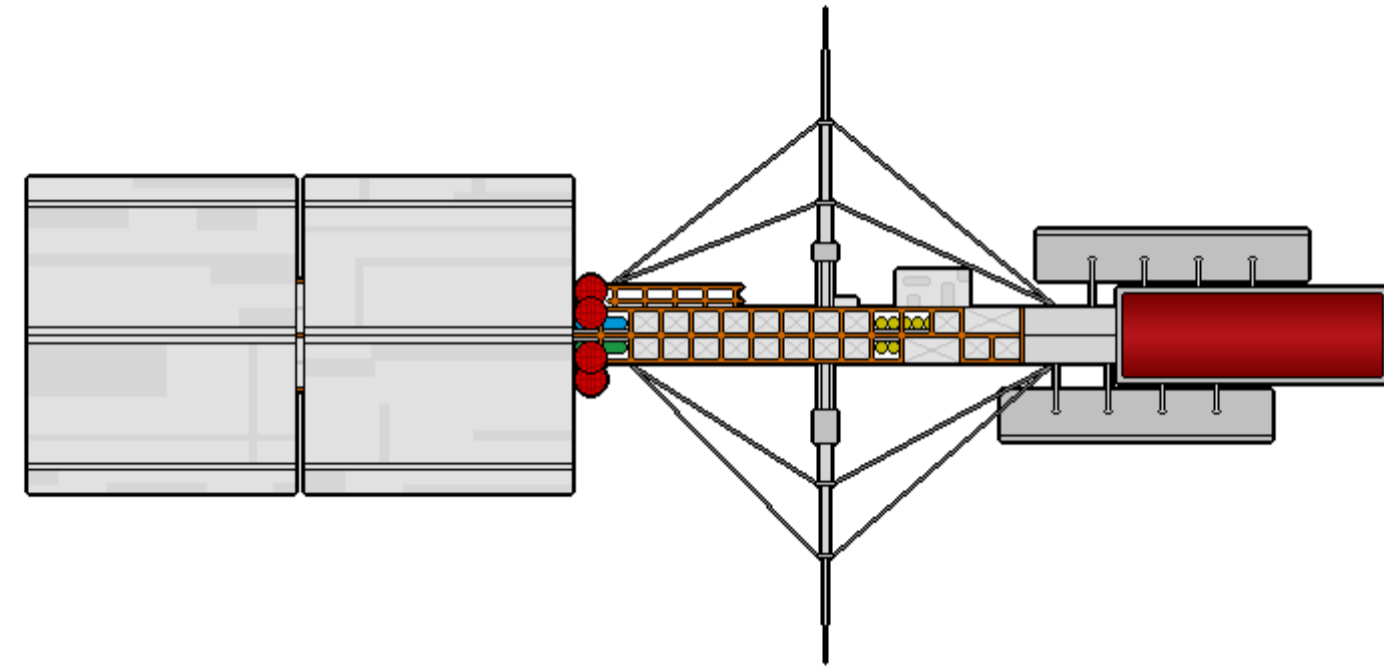
The United Federation of Planets extends membership to Bajor.



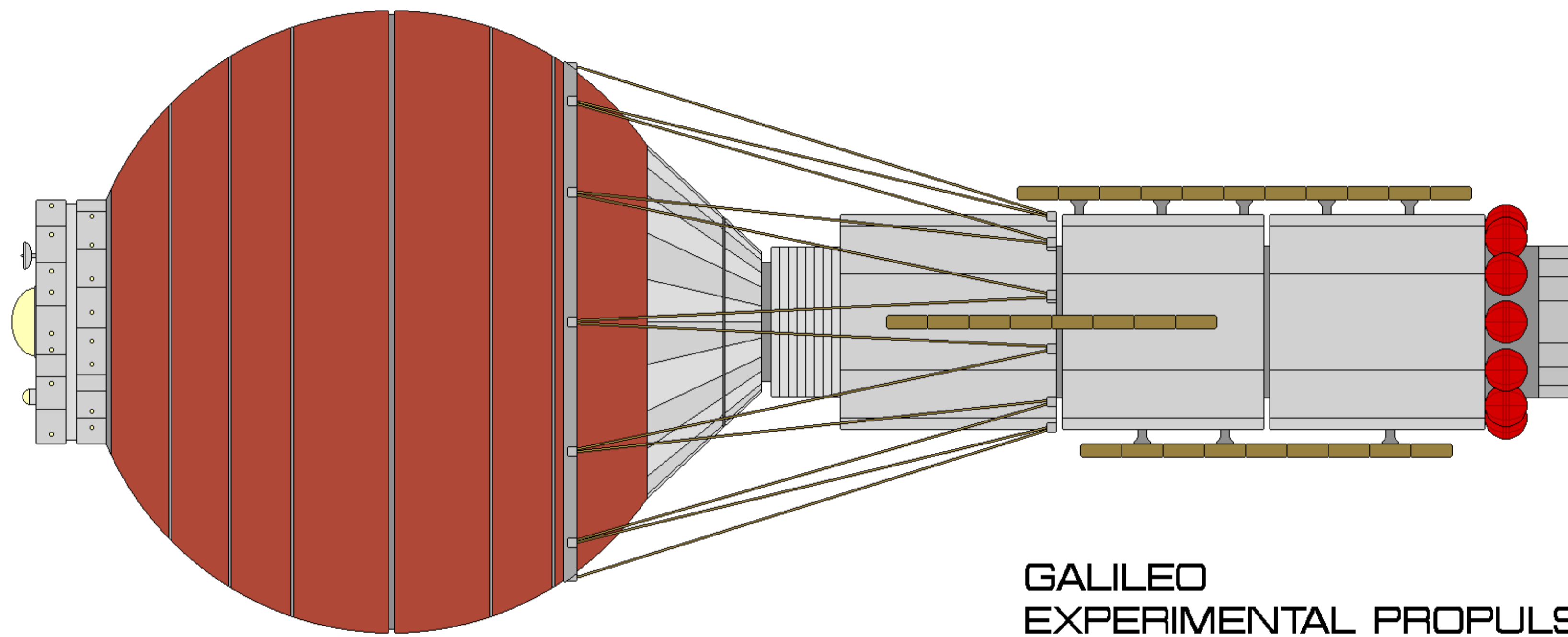
STARSHIP COMPARISON GUIDE



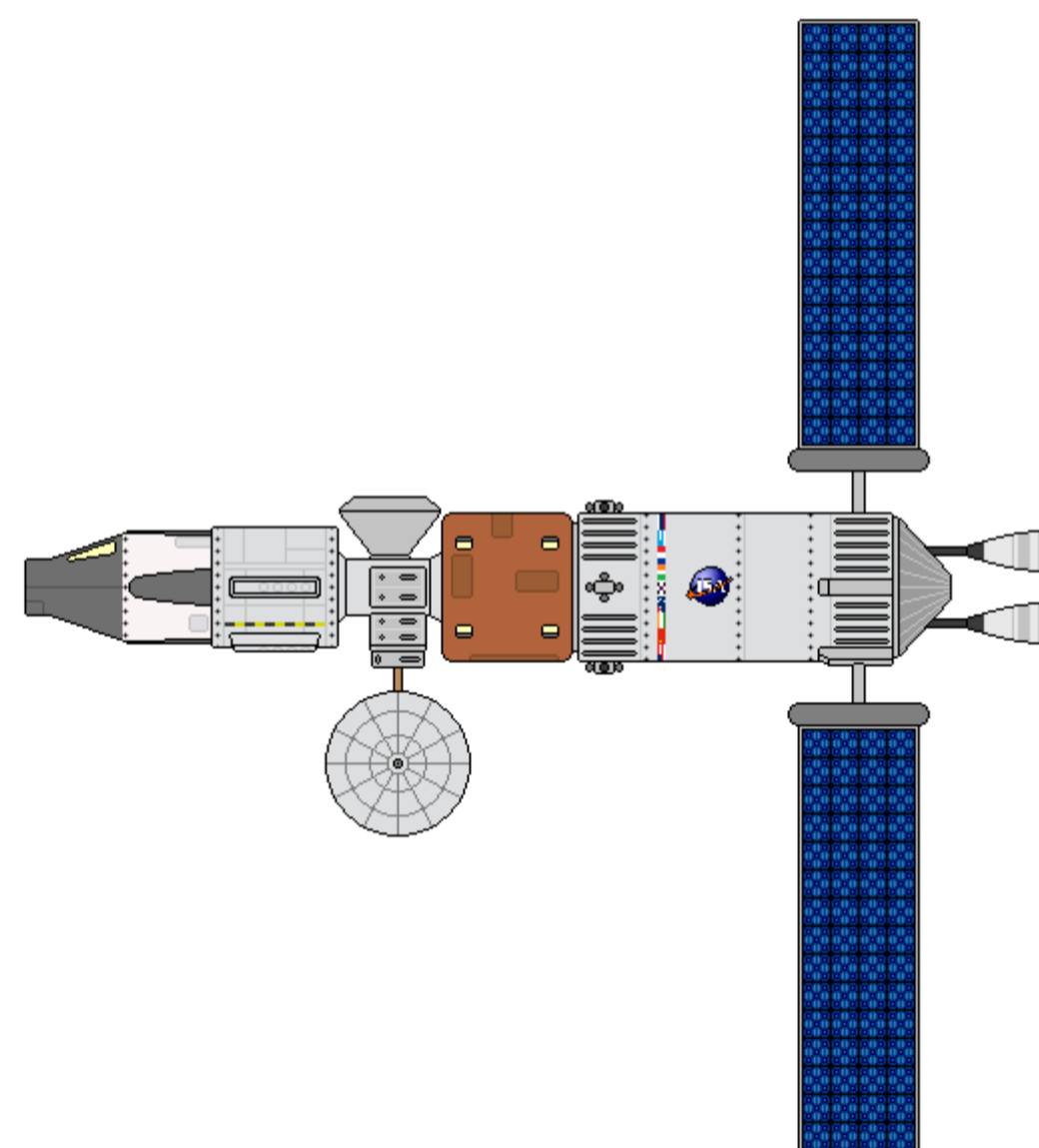
APHRODITE
MISSION SPACECRAFT (2001)



AVENTEUR
MISSION SPACECRAFT (2008)



GALILEO
EXPERIMENTAL PROPULSION SHIP (2028)



ARES
MISSION SPACECRAFT (2030)



GLOSSARY

Array: Generally, a combination of identical sensors, weapons, or other equipment operating in conjunction.

Augment: A type of Human genetically modified before birth (originally) in the mid-20th century.

Auxiliary: a common name for small craft embarked aboard and utilized by starships for various tasks. Craft types include work pod, shuttlepod, shuttle, plus various tactical craft and other special-purpose craft.

C/P/S: Centerline/Port/Starboard (see P/S).

China: On Earth, a powerful pre-Unification state; joined the Eastern Coalition (ECON) in 2031, and formally absorbed in 2055.

CNSA: China National Space Administration, the official launch agency for the pre-Unification state of China on Earth.

Deep space: The region near or beyond the recognized borders of the Federation, often uncharted in any considerable detail.

Deimos: one of two natural satellites of the planet Mars.

Delhi: a territory of the pre-Unification state of India on Earth.

Deuterium: hydrogen-2, or heavy hydrogen; an isotope of hydrogen often used as one of the primary ingredients for fuel in matter-antimatter reactors (the other being antideuterium).

D-Y: Dinyan-Yoyodyne Conglomerate, a pre-Eugenics War technology and industry sector corporation on Earth that served as the Great Khanate's agent in plans for planetary domination. Collapsed into smaller, disparate companies in 1996.

EC: Eurasian Confederation, a large pre-Unification nation-state on Earth, formed from the smaller states of Afghanistan, Kazakhstan, Kyrgyzstan, Mongolia, Russia, Tajikistan and Uzbekistan in 1996. It was absorbed into the Eastern Coalition (ECON) in 2031, formally so in 2055.

ECSA: Eurasian Confederation Space Agency; formed in 1996 from the constituent agencies and absorbed into the ECSN in 2031.

ECSN: Eastern Coalition Space Navy; formed in 2031 from the alliance's constituent agencies.

ELRS: Extreme Long Range Sensor

ESA: European Space Agency, an intergovernmental space exploration organization of 22 European member states on pre-Unification Earth.

Eugenics Wars: a late 20th century global conflict on Earth in which the Augments established themselves as super men and attempted world domination.

Great Khanate: an historical designation for the tight but self-contentious organization of Augments that sought to dominate Earth in the late 20th century, culminating in their defeat in the Eugenics Wars.

GW: GigaWatt

HEO: High Earth Orbit; a geocentric orbit with an altitude higher than 35,800 kilometers. In the modern idiom, High Planetary Orbit (HPO) is above that of the geosynchronous orbital range, with orbital periods greater than that of the rotation of the planet in question.

India: an important pre-Unification state; subsumed into the Eastern Coalition (ECON) in 2055.

IRC: ISA Rescue (or Regulatory) Cutter. Ship prefix for the names of vessels of the International Space Agency.

ISA: International Space Agency, a NUN agency on pre-Unification Earth, formed in 2018 and serving as a conduit for peaceful and cooperative space activities by the major space-capable nations, and later for most space activities of any entity, including corporations, organizations, and private individuals. Succeeded by both the UESPA and UESN in 2067 and 2069, respectively.

ISRO: Indian Space Research Organization, the national space agency for the pre-Unification state of India on Earth.



GLOSSARY (CONTINUED)

KARI: Korea Aerospace Research Institute, the national space agency for the pre-Unification state of South Korea on Earth; transitioned into the RAKS in 2003.

Korea: formally the Royal Republic of Korea on Earth, a 2003 (pre-Unification) merger of the prominent nation of South Korea and the xenophobic and developmentally-devastated state of North Korea.

Laser: Typically, a secondary weapon on early space vessels. Current shielding technology has largely negated the threat posed by the coherent electromagnetic beam.

LEO: Low Earth Orbit; an altitude of 2,000 kilometers or less. In the modern idiom, Low Planetary Orbit (LPO) is approximately one-third or less of the radius of the planet in question, in altitude.

LIDAR: Acronym for Light Detection And Ranging; a sensor that uses laser pulses to calculate the size, speed, and distance of an object.

Lunar: of or relating to Luna (see Moon).

M: Meters

Main Belt: the designation for the Sol system's major asteroid belt.

M/AM: Matter / Antimatter

Mars: the fourth planet in the Sol system.

Mission spacecraft: a catch-all category for governmental spacecraft, though usually non-military, that operate independently and perform certain functions, such as search & rescue or regulatory enforcement.

Moon: the pre-colonization name for Luna, the sole natural satellite of Earth.

MT: Metric Tons

NASA: National Aeronautics and Space Administration, an independent agency of the United States government responsible for the civilian space program, as well as aeronautics and space research.

Navigation Light: Yellow in color, these lights are generally located on or near major points of superstructure of a space vessel. They often provide low-emission positioning signals for specific locations on and within the vessel for the purposes of proximity maneuvering by another vessel and relative destination positions for transporters. Not to be confused with red or green running lights.

NTR: nuclear thermal rocketry

NUN: New United Nations. Formed in 2011, first dissolved in 2053 (during the Third World War), re-formed in 2065 (two years following First Contact), then finally dissolved in 2079. Authorized the formation of the ISA (2018), UESPA (2067), UEDP and UESN (both 2069). Succeeded by the UEDP.

Oceania: On Earth, a distinct geographic region spanning the eastern and western hemispheres of the northern and southern Pacific Ocean.

P/S: Port/Starboard; left & right side, respectively, in naval parlance.

Phobos: one of two natural satellites of the planet Mars.

RCS: reaction control system; a spacecraft system that uses thrusters to provide attitude and station-keeping control (and sometimes propulsion).

RAKS: Royal Republic of Korea Spaceforce, the new nation's space and regulatory agency. Merged with other international agencies to form the ECSN in 2031.

Running Light: Red (port/left) and green (starboard/right) lights traditionally denoting the observed side of a water vessel under low light conditions. Utilized for similar purposes by space vessels of the UFP, though generally for rapid orientation by the pilots/helms of other vessels maneuvering in close proximity. Not to be confused with yellow navigation lights.

Russia: an important pre-Unification state on Earth; it merged with six other states in 1996 to form the Eurasian Confederation (EC).



GLOSSARY (CONTINUED)

South Korea: an important pre-Unification state on Earth; it merged with the smaller, xenophobic and developmentally-devastated state of North Korea to form the Royal Republic of Korea in 2003.

South Pacific Ocean Uninhabited Area: a spacecraft "cemetery" on Earth, a target in pre-Unification times for spacecraft that had reached the end of usefulness and destroyed by de-orbiting.

Subclass: A significant variant of a given class of ship, usually newbuilds, though sometimes including important modifications to existing ships, that are not intended to replace the existing ships of the original class. Often named for the first ship to reach that final intended production standard.

Transport: A Starship or other vessel dedicated to transporting passengers or cargo. They range in size from small two- or three-crew ships to huge starships and freighters.

Trans-spectral Imager: A sensor that compares changes in perceived light to help determine the platform's location, as well as distance and aspect of a target.

TW: TerraWatt

United States: On Earth, a powerful pre-Unification nation. An original signatory to the *Traité d'Unification*, which established the United Earth government in 2130.

USAF: United States Air Force, the aerial and space warfare branch of the armed forces of the pre-Unification nation of the United States on Earth.

USNS: United Survey and Navigation Ship. Prefix for joint missions of the ISA & NASA.

Venus: the second planet in the Sol system.

Western Alliance: Originally a NATO agency to oversee the 2002 pre-Unification economic and defensive agreement between Earth's United States and European Union, it became a major force for the coordination response to the Swarm incident of 2026 and a competitor to the rival Eastern Coalition.

Work Pod: The general name for manned, sub-impulse craft used for construction, maintenance, repair, and other service tasks in space. A variety of external tools and modules are attached to the work pods to facilitate a multitude of tasks.

YPS: Yoyodyne Propulsion Systems, an offshoot and surviving entity of the post-Eugenics Wars Dinyan-Yoyodyne Conglomerate on Earth; most associated with the United States and Korean nations, as well as the Western Alliance.



Delta Dynamics appreciates the sponsorship of the following:



Tigan Pergium Mining



Federation News Network (FNN)



Earth Sciences Institute



Plexicorp



The Anbo-ryutsu Society



Utopia Planitia Shipyards



Vulcan Science Academy



Starfleet Academy

...and Members like you.



THE FOLLOWING ARE OTHER STARSHIP RECOGNITION MANUALS
PUBLISHED BY DELTA DYNAMICS:

REPORTS

- APHRODITE mission spacecraft
- ARES mission spacecraft
- AVENTEUR mission spacecraft
- BONAVENTURE survey cruiser
- BONAVENTURE dilithium power testbed
- BURKE frigates
- CAVALRY light destroyers
- CONSTITUTION heavy cruisers
- DURANCE cargo tugs
- DY sublight interplanetary transports
- GALILEO experimental propulsion ship
- HORIZON heavy cruisers
- SYRACUSE destroyers
- TRENT destroyers

