

GALACTIC SUITE DESIGN

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Press dossier
2010

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GALACTIC SUITE DESIGN

The Company

GALACTIC SUITE DESIGN is a leading company in conceptualisation and design in the aerospace industry. Founded in Barcelona in 2007, GALACTIC SUITE DESIGN develops concepts, design and interiors of habitats and vehicles in the aerospace sector. The project that first brought the company into the public eye was the Galactic Suite Spaceresort, which develops the first worldwide chain of space hotels combining orbiting and earth-based elements to offer a comprehensive experience in space tourism.

GALACTIC SUITE DESIGN is a team of professionals from different disciplines whose work is based on a constant reinvention of the way in which we understand existing processes, situations and objects. All work is developed based on propositive strategies in order to offer users the best possible experience. The working process is based on LISTENING without prejudices or preconceived ideas, ANALYSING the data provided and completing them to accumulate sufficient knowledge of needs, and LOOKING around in search of anything that society may need.

The Internal Product

GALACTIC SUITE DESIGN has developed a chain of habitats in near space, organised at different altitudes and depths above and below the earth's surface, respectively. Its initial projects include collaborations with private developers, the GS Spaceresort, the GS Spaceport and the GS Island.

It has also developed habitats and vehicles for Mars for an American company that is developing the future colony on the red planet (GS Mars), the Moon (GS Moon), the frontier between the atmosphere and space at an altitude of 40 km (GS Nearspace), the intermediate layers of the atmosphere up to an altitude of 10 km (GS Dirigible), at the highest points on the earth's surface (GS Himalayas), in parabolic flights recreating microgravity (GS Parabolic), or in the ocean depths (GS Seasuite). The company is also developing the GS Product to bring the aerospace experience closer to the general public by means of theme products related to the concepts developed by Galactic Suite.

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01. GS MARS

It is the collaboration developed with 4Frontiers Corp., an American company that is developing the framework for the future international colony that is scheduled to be established on the planet in the decade of 2050.

GS design has developed the habitats and growth strategies of the colony for their future development. The first trips will entail a stay by the astronauts for a period of 2 years, including 1 year on the planet's surface.

Depending on the point of their respective orbits, Mars lies between 52 million to 402 million kilometres from the Earth. Due to its weak magnetic field, its atmosphere is not very dense, and the base will be positioned on a low point of the planet to leverage the maximum atmospheric pressure, and close to its Equator to optimise launching and landing operations.

GS Mars is developing a small extendable base using modules of different typologies and building systems in the area of the Meridiani Victoria Crater for a total of 20 inhabitants in the initial phase.

02. GS MOON

It is the development of the habitats and vehicles in collaboration with organisations that are preparing man's future return to the Moon within the framework of the international colony that is scheduled to be established on the satellite probably in the decade of 2020.

The first trips will entail a stay by the astronauts on the colony for a period of 1 to 3 months, with tourist and scientific activities.

Depending on the point of their respective orbits, the Moon is located between 356,000 and 407,000 km from the Earth. Due to the fact that it has no magnetic field or atmosphere, the base would be located inside a crater protected from the sun's radiation, although it will have solar collectors in the peaks of eternal light to guarantee a continuous supply of energy.

GS Moon is developing a small extendable base using modules of different typologies and building systems for a total of 6 inhabitants in the initial phase.

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03. GS SPACERESORT

It is the establishment of a mini space station in low earth orbit (LEO) for private passengers, the first space hotel. It is conceived as a non-permanently occupied shelter for tourists and the crew periodically.

The initial phase will involve the development of 2 modules, with a bioinspired design, for 2 passengers and 1 crewmember. In the second phase, for a total of 4 passengers and 2 crew members, the station will be extended to 5 modules: 3 room modules, 1 service module and 1 multiservice module, toilet and spa. All modules will have artificial atmosphere, thermal control and solar collection control systems for the generation of electricity.

The hotel will be located in a low Earth orbit, at an altitude of 450 kilometres, where it is still under the protection from the radiation provided by the Van Allen Belts, and permits faster access and return to the Earth. The tourists will be accommodated in the hotel for between 4 and 6 days, orbiting the planet once every 90 minutes, and therefore enjoying 16 sunrises and sunsets a day.

The objectives of these ministations include short-term tourism (around 1 week), private research into microgravity and the development of a communications and remote observation platform.

04. GS SPACESHIP

It is the development of the interior design for a manned reusable launch vehicle (RLV) and for transport with an initial capacity for 4 passengers and 2 crewmembers in LEO. Until then, access to the GS Spaceresort will be guaranteed by the Russian Soyuz spacecraft.

The flight profile desired for the GS Spaceship is based on horizontal takeoff and landing with conventional jet propulsion for takeoff and glided landing. A two-phase rocket motor will take the ship to the speed needed to enter orbit at an altitude of 450 km.

The motors and tanks will be located in the rear half of the fuselage, while the front section will house the passengers and crew in reconfigurable seats that will be retracted once the ship is in orbit to be able to leverage the maximum empty volume inside.

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This ship should permit two launches a month for manned transport, or for putting small commercial satellites into orbit and private research into microgravity.

05. GS SUBORBITAL

It is the development of a manned reusable launch vehicle (RLV) and for transport with an initial capacity to reach an altitude of 110 km with 4 passengers and 2 crewmembers in LEO. The development of this ship coincides with an initial phase of the development of GS Spaceship.

06. GS NEARSPACE

It will consist of the development of a reusable inflatable aircraft to initially accommodate 6 passengers and one crewmember to a flight altitude of 40 km, in the so-called “near-space” area, where passengers will be able to observe deep space and a considerable curvature of the horizon, although they will be unable to float in microgravity.

The flights will be made in pressurised capsules with systems for the generation of artificial atmosphere, thermal control and solar capture to generate electricity.

The balloons will operate from a land base, which will consist of an embedded architectural structure with full hotel services (lobby, restaurants, rooms, convention centre, spa and wellness), from which the balloons will take off daily for near space.

The main objective will be short-stay tourism, from a few hours to 1 or 2 days, and remote observation and telecommunications.

07. GS DIRIGIBLE

It is the development of an inflatable aircraft, with capacity for initially 2 passengers and one crewmember to a flight altitude of 8 km, in the area called the stratosphere, where the passengers can enjoy a flight unaffected by the Earth's topographic features.

The dirigibles will provide overnight accommodation, and their inside has been designed like a hotel suite. They will be based in Dubai (UAE), where the aircraft will be anchored to a tower that will provide full hotel services: lobbies, restaurants, convention rooms, wellness and spa.

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Each dirigible-room can take off from there for journeys lasting a few days. The craft was conceived as a semi-rigid dirigible with a periscopic internal structure that renders it possible to expand the volume of helium of the inside to reach the necessary altitude of up to 8,000 metres. The electrical motors are driven by photovoltaic energy with an external flexible capturing coating.

The front gondola has been designed as a pressurised capsule and with systems of generation of artificial atmosphere and thermal control. It will have a room with a bathroom, a dining room area and a small kitchen, as well as a control room for the ship where the crewmember will also be quartered.

The objective of the GS DIRIGIBLE is short-term tourism and as an access platform to remote sites.

08. GS HIMALAYAS

It is the development of a hotel on the summit of the Himalayas mountain range.

It is conceived as a non-permanently occupied shelter that will consist of 8 bio inspired spherical modules, including 1 access module, 3 suite modules, 1 common space-restaurant module, 1 wellness-spa module, 1 service module and another installation and energy generation module.

The first site selected is the south side of Mount Changtse at an altitude of 7,500 metres, in the Chinese part of the Himalayas, which permits access by air and land for guests and goods. The temperatures can drop to 60° degrees below zero and atmospheric pressure is equivalent to one-third the standard sea level.

The modules will have artificial atmosphere and thermal control systems. They will be constructed as aluminium and compound material multilayered structures, and will be transported to and assembled on the site by Skycrane S-64-type helicopters. Large aluminium and glass structures will offer impressive views of Mount Everest from any point.

The hotel will accommodate up to a total of 6 guests and 3 employees for periods of between 5 and 8 days. The interior design features continuous and undulating spaces with protuberances that house all the necessary equipment and with warm and sensual materials.

The project also includes the development of an overland access vehicle, which draws its inspiration from the movement of caterpillars and spiders, and will be able to traverse rough surfaces with a minimum impact. The vehicle will be driven by means of an electrical engine that will be equipped with solar panels

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and will have a sealed capsule for a crew of 4 with thermal control and artificial atmosphere.

09. GS PARABOLIC

It is the development of the interiors of conventional passenger planes such as the A300 to maximise the experience of weightlessness in tourist flights.

The flight profile for a weightlessness simulation comprises an ascent to 10,000 metres, where a series of manoeuvres begins with the plane ascending and descending in parabolic free fall. In this descent, and for approximately 30 seconds, the sensation inside the plane is one of weightlessness.

These parabolas are repeated up to approximately 15 times, during which the sensation of gravity may be zero or set for it to resemble that of the Moon or Mars.

GS Parabolic will design the interiors of the A300 Zero-G planes to offer environments for these periods of reduced gravity, performing all kinds of recreational activities, such as GS Parabolic Spa, or offering a set for engaging in weightless sports or for filming TV programmes at zero gravity.

10. GS SPACEPORT

It is the development of private spaceports everywhere with space-related theme facilities.

Parallel to the development of space tourism and vehicles that can operate from installations that reduce the degree of complexity of maintenance and preparation of the current rockets and shuttles, Galactic Suite will establish a new generation of private spaceports around the world.

These facilities will have the entire infrastructure needed for the preparation and operating of reusable ships that permit less costly access to space.

The Galactic Suite Spaceport will be built in strategic places around the globe, which will serve as bases for the Point-to-Point flights, suborbital flights that connect intercontinental nodes in journeys of less than 2 hours and from where conventional flights in airplane or in very light jets will depart towards the final

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destinations. Some of these centres will be Florida, Catalonia, Dubai and Hong Kong.

The GS Spaceport will also serve as a point of departure for tourists visiting the GS Spaceresort space hotels, as well as private ships that make suborbital flights, such as the GS Suborbital, carrying passengers or cargo.

The first of these spaceports will be located in the Tropics, next to the GS Island, and will have a total surface area of 40,000 m² and will include facilities for launching and maintaining the ships, control and training buildings (including a centrifuge, floatation tank, gymnasiums, infirmary, libraries, conference rooms, etc).

The GS Spaceport will also be complemented with space-related theme facilities, such as hotels, museums, shops, restaurants, thus becoming tourist centres where the public can also watch the launch.

The GS Spaceport will develop cutting-edge technologies to optimise access to space and to reduce the impact of these launches on the environment.

11. GS ISLAND

It is the development of a high-profile tourist facility on a private island in the Tropics where Galactic Suite will accommodate and train its space tourists.

The stay in the GS Spaceresort, the space hotel, requires a prior training period of 16 weeks and a subsequent flight recovery period of 2 weeks. During these periods, space tourists may stay on the GS Island with their family, if they wish.

GS Island comprises a luxury hotel resort and a recreational centre surrounded by lush nature. A large part of the island will be left intact to conserve all its original fauna and flora.

In the Accommodation area, tourists will have a total of 200 rooms divided into different types of floating suites on the coast, or suspended from the nearby cliffs. The main building will have a conference centre, restaurants and cafes, a spa and an area for sports such as golf, tennis and canoeing. The area will have a built-up surface area of 40,000 m².

The Recreational area is proposed as an infrastructure for daily visits from nearby sites where the infrastructure of the technical and training area can be viewed safely from a distance. In these installations, the space tourists' relatives can also engage in space-related educational and leisure activities, as well as a splendid vantage point overlooking the launching and landing strip. It will cover

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a built-up surface area of 20,000 m², including museums, simulators, shops and restaurants.

12. GS SEASUITE

It is the development of a hotel under the sea, at a depth of around 50 metres.

It is conceived as a permanently occupied facility comprising 9 semi-spherical modules, with a bioinspired design, including 1 lobby module and a common space, 4 suite-modules, 1 restaurant-cocktail bar module, 1 wellness-spa module, 1 sealable module providing access to seabed and 1 installation module. It will have a total surface area of 2000 m².

They will be permanently connected, by means of a tunnel and a service of electric cars, with the surface, from where they will also receive their supply of energy and oxygen. The modules will have artificial atmosphere and thermal control systems. They will be built as aluminium structures with large multilayered windows and will be conveyed to the site and installed there by means of crane ships and pocket submarines.

They can house a total of 8 guests and 6 employees. The interior design features vaulted and undulating spaces.

The first site selected is on the Mediterranean coast, off the municipality of Castelldefels, in Barcelona, 200 m from the coast and at a depth of 50 m on a bed of sand and rock.

The GS Seasuite will provide direct access to the seabed for scuba diving, underwater research or training in neutral floatation for a future space trip to the GS Spaceresort.

13. GS PRODUCT

It is the development of theme products related to aeronautics and space under the Galactic Suite concept.

Galactic Suite seeks to become the reference company for anything that relates space to leisure and entertainment, bring the project closer to people, bring space closer to people and extend the project's chain of business. To this end, GS Product has already begun to licence the Galactic Suite brand.

GS Product will be developed in two major areas:

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A. The digital world, including products related to the observation of the Earth and space through the network, as well as the production of games, simulators and virtual realities of these segments for household consumption by means of consoles and personal computers.

B. The physical world, including products and concepts. The concepts area pertains to Galactic Suite's licence to develop service projects on the Earth but with direct reference to space. This includes theme hotels, leisure areas related to the preparation of the space tourists, space cafes franchised in the main cities, etc.

The products include all the merchandising around Galactic Suite and space, as well as products related to collecting, space museums and centres for children and for adults.

The External Product

GALACTIC SUITE DESIGN offers its services to companies from the aerospace sector that seek to renew their concepts and reorient their products to satisfy people.

Its areas of action include a new way of looking at individual and collective transport; conceptualisation of new spaces and times in air, overland vehicle and railway transport; the personalisation of aircraft, cars and trains; and aerospace interior design.

As a design supplier, its potential clients in the aerospace and transport sector include ESA, NASA, EADS-Astrium, Airbus, Boeing, Lockheed-Martin, Thales-Alenia, Alstom, etc

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Contact

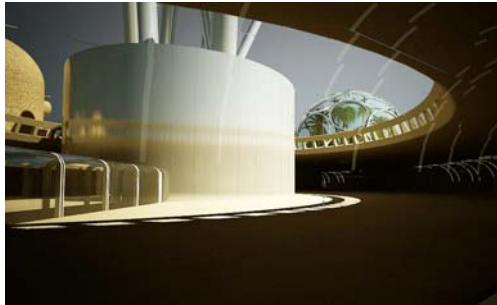
Galactic Suite Design
Pellaires 30-38 G8
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SPAIN

For further information on the company or project, or if you wish to be sent any of the following images in high resolution, please contact:

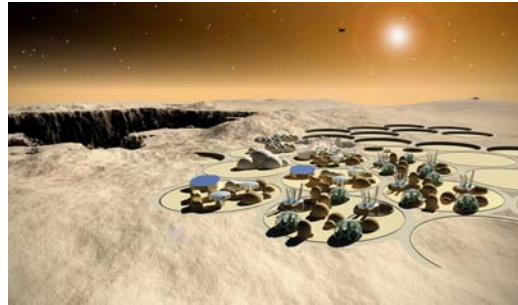
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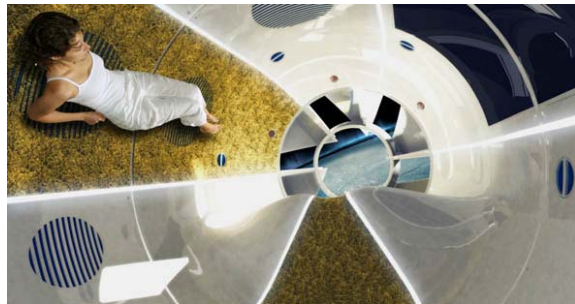
01A. GS Mars 01



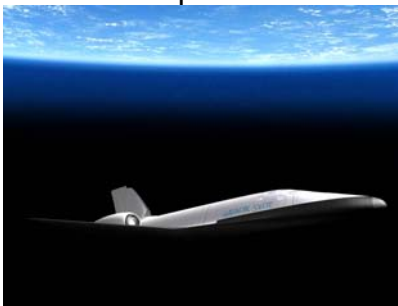
01B. GS Mars 02



03A. GS Spaceresort 01



03B. GS Spaceresort 02



04A. GS Spaceship 01



04B. GS Spaceship 02



06A. GS Nearspace 01



06B. GS Nearspace 02

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07A. GS Dirigible 01



07B. GS Dirigible 02



07C. GS Dirigible 03



07D. GS Dirigible 04

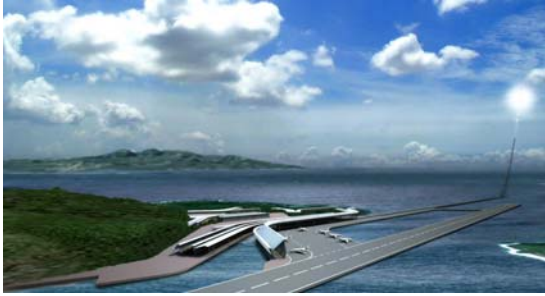


08A. GS Himalayas 01



08B. GS Himalayas 02

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10A. GS Spaceport 01



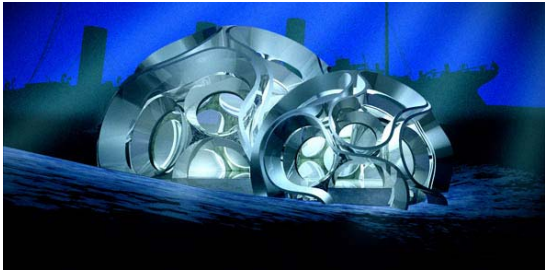
10A. GS Spaceport 02



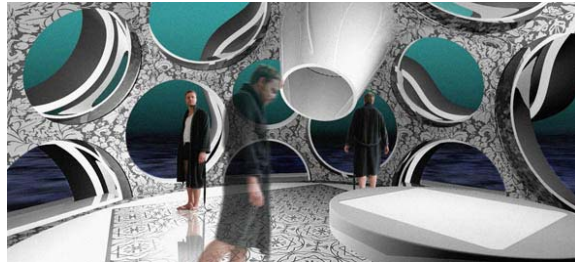
11A. GS Island 01



11B. GS Island 02



12A. GS Seasuite 01



12A. GS Seasuite 02