

Discovering French Guiana and the Space Centre

Staying in French Guiana

Living in Kourou

Working at the Guiana Space Centre



3rd Edition 2017



STAYING

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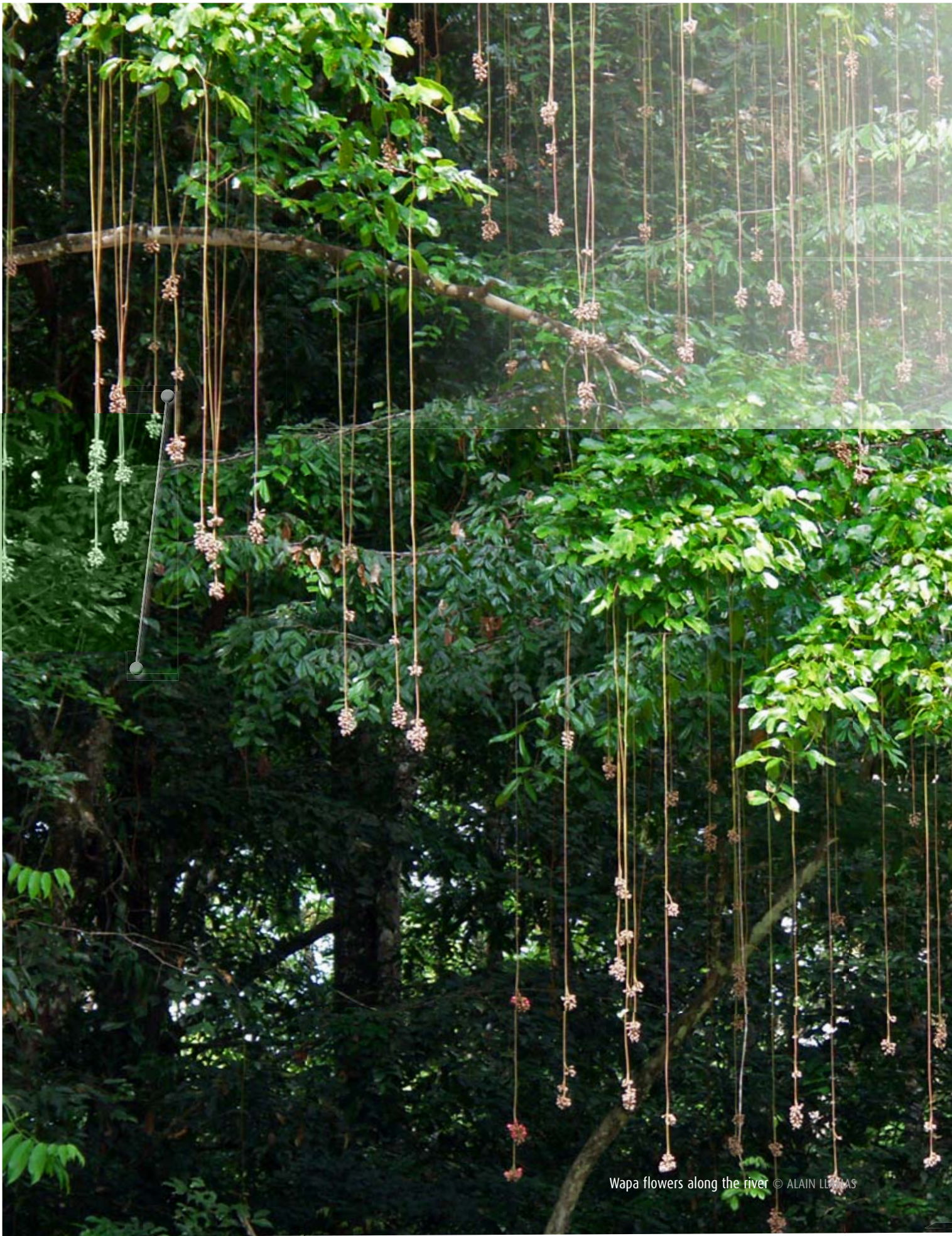
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Wapa flowers along the river © ALAIN LÉVES



STAYING

in French Guiana

*Overview of a
little-known country*

Welcome to French Guiana

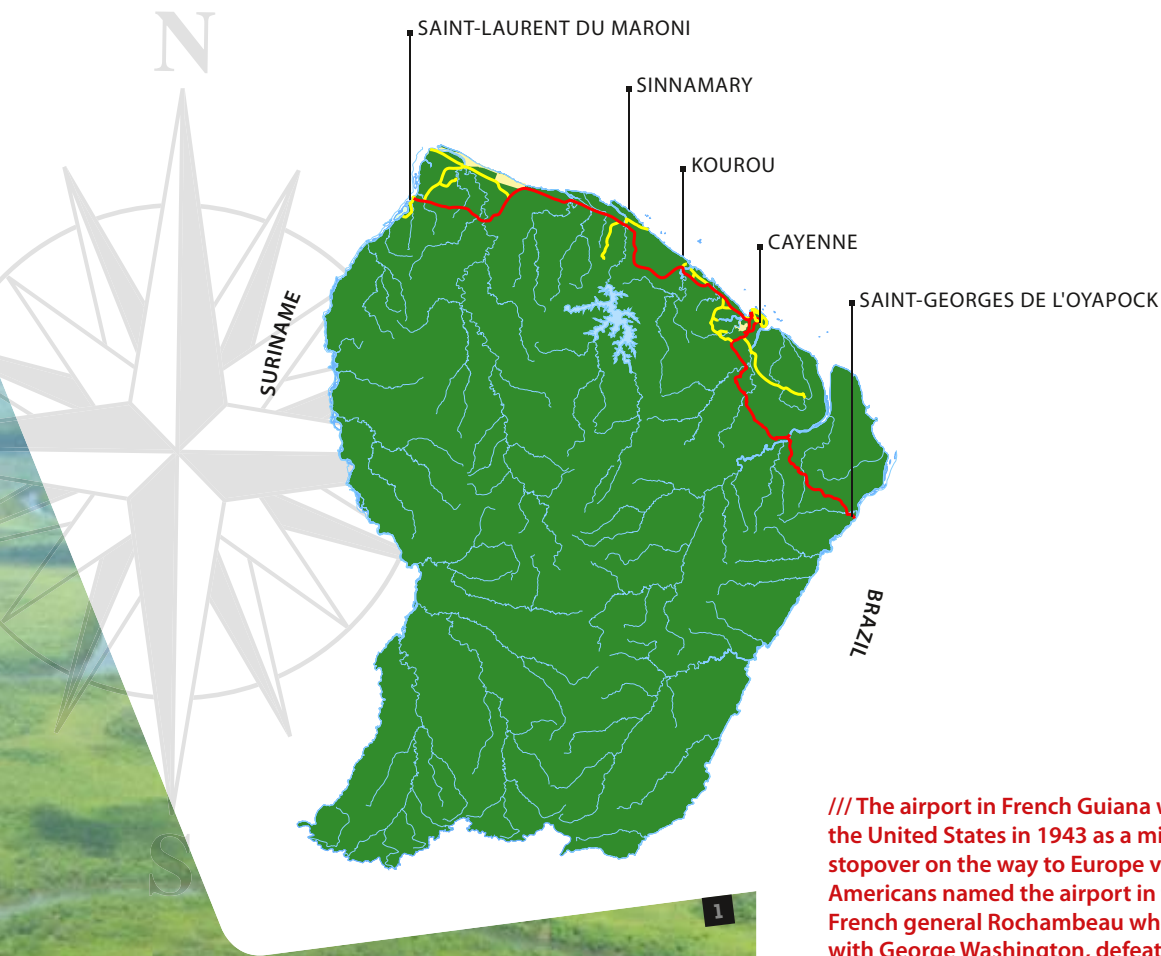
FRENCH Guiana is an outermost region of Europe and a French *département* on the Atlantic coast of South America. It is located 7,000 km away from mainland France and is bordered by Suriname (formerly Dutch Guiana) to the west and Brazil to the east and south.

It stretches over 84,000 km², i.e., 1/6th of France, or the size of Austria. The Equatorial forest covers more than 90% of its surface area, and resembles a broccoli field when seen from above.

Roads run along the coast from Saint-Georges-de-l'Oyapock at the Brazilian border to St-Laurent-du Maroni and Apatou at the Surinamese border. The interior of the country can only be explored by inland waterways or by air.

You will land in Matoury, 20 minutes away from the centre of Cayenne, the capital city, and one hour from Kourou. Air France and Air Caraïbes fly to French Guiana with direct eight to nine-hour flights from the Paris Orly Airport.





/// The airport in French Guiana was built by the United States in 1943 as a military aircraft stopover on the way to Europe via Africa. The Americans named the airport in tribute to the French general Rochambeau who, together with George Washington, defeated the English in the decisive Yorktown battle during the American Revolutionary War.



It was renamed as Cayenne-Félix Eboué Airport in 2012. Félix Eboué, who was born in French Guiana in 1884, was a colonial administrator in equatorial Africa. He was instrumental in establishing an operational base in Africa for the Free French Forces in response to General de Gaulle's Appeal of 18 June, 1940. He is interred in the Pantheon in Paris.

1 "Cayenne Island" from the sky © ALAIN LLAMAS

2 Plumage of macaw © PASCAL STUDER

3 Humming bird © CSG/OV P. BAUDON

4 Felix Eboué Airport © CSG/OV P. BAUDON





The Weather

WHILE daytime temperatures frequently exceeds 30°C all year long, a light sweater can sometimes be comfortable during the rainy seasons.

The rainy season starts in December and end in June or July, with a break in February or March, “le petit été de mars”. However these rains mostly fall as short-lived heavy showers, and days without sun are seldom. In French Guiana, annual rainfall is four times greater than in Paris, but takes place over half the number of days.

	KOUROU	PARIS
Average temperature	26,4°C	12°C
Extreme temperatures	18,1°C/34,5°C	-23,9°C/40,4°C
Average extreme temperatures	23,4°C/30,2°C	8,9°/16 °
Average air humidity	86 %	75 %
Annual rainfall	2 838 mm	637 mm
max 24h precipitation	260 mm	104 mm
Annual rainfall	440 hours	840 hours
Annual sunshine	2 161 hours	1 661 hours
Days with thunderstorms	30 days	18 days

/// If your housing is not well-ventilated, mold can grow in your wardrobes during the rainy season. Regularly air out your clothes and leather goods, electronic equipment should be kept in an air-conditioned or well-ventilated room. Otherwise, put them in stand-by mode. Cameras can be stored in waterproof containers with silica gel. Another good solution to avoid mold is light bulbs permanently turned on in your closet.

The rainy season’s lull and its persistent trade winds are sometimes accompanied by reduced visibility caused by the presence of sand in the air carried over from the Sahara Desert. The long summer holiday period is also the main thunderstorm season. Storms frequently erupt at the end of the day. From August on, rainfall is rare and gardens need watering. However, humidity remains quite high year round.

Due to its proximity to the equator, the daylight hours in French Guiana remain practically unchanged throughout the year. The sun rises between 6 and 6:30 a.m. and sets between 6:30 and 7 p.m.

1 Swimming on Royale Island © CSG/OV P. BAUDON

2 Going to school on a rainy day in Kourou © CSG/OV

French Guiana, the Guianese, and Their History

INCREASING from 55,000 inhabitants in 1975 to 146,000 in 1990, the estimated population today is around 270,000. This demographic explosion related to immigration and to a birth rate twice as high as metropolitan France, weighs heavily on the education and employment sectors. More than one of every two French Guianese is younger than 25 and more than one in three is younger than 15.

French Guianese society today is representative of both its history and diversity. Many cultural groups have co-existed for a long time without blending together. While younger generations tend to mix more than in the past, society remains defined by strong and often somewhat isolated cultures.

Pre-Columbian Period

and the Indigenous

Guianese (Amerindians)

The first traces of humans found (pottery, petroglyphs, rock carvings, etc.) go back 7,000 years. The first inhabitants were Amerindians, the indigenous Guianese. At the beginning of the 17th century there were several dozen tribes and many thousand inhabitants. Today their number is estimated at just 7,000 and represents six ethnic groups. The Kali'nas (or Galibi) are the most numerous and together with the Lokono (or Arawak) they are settled on the coast. The Palikur, the Teko (previously called Emerillon), and the Wayampi (only a few hundred) mostly occupy the Oyapock river banks. The Wayana live inland, along the upper Maroni River.

European conquest gradually took control of the region from the Amerindians which by the mid-20th century, accounted for no more than 1,500 survivors.

Kalawachi, the first private museum dedicated to Amerindian traditions, was created in Kourou in 2009 and the CAAK (Centre for Amerindian Archeology in Kourou) opened to the public in 2014 next to the Carapa's rock carvings.





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/// Manioc (also known as cassava or yuca) has long been the major staple food and this is still true in rural areas. It is consumed in the form of cassava meal (a type of semolina locally known as couac), in flat cakes, as a vegetable, or in the fermented cachiri beer. It has also found a place in contemporary regional cuisine.

1 Prehistoric tools © CSG/OV

2 Carapa rock carvings in Kourou © CSG/OV

3 Manioc plant © D. BOUIX

The Period of Slavery and Habitations (Plantations)

DURING the 17th century the French made several attempts to establish permanent settlements in French Guiana. The newcomers ignored the natural environment, and, as a result, crop yields were poor, malaria and yellow fever rampant. White settlers plundered the Amerindians' abattis (slash-and-burn plots) and the reaction was often violent. For more than 70 years, the French, English, Spanish, and Dutch struggled for control of the territory between the Orinoco and Amazon Rivers, often in retaliation for wars taking place in Europe. The first productive land endeavor was carried out by the Dutch in the mid-17th century. They came from Brazil, where they had already mastered sugarcane cultivation and sugar production. In 1676 an expedition led by Jean d'Estrées definitively brought French Guiana under French control.



The first European colonization of French Guiana was carried out by indentured European servants, also called *trent-six mois* (thirty-six months) because they were bound to their masters by three year contracts. Due to a lack of volunteers, these workers were quickly replaced by African slaves, a labor force engaged in the production of sugarcane, cotton, spices, cocoa, coffee, achiote, and indigo cultivated in the Habitations, the French name for plantations.

Slavery was governed by the laws of the Code Noir (the "Black Code," the document which defined the conditions of slavery in the French colonial empire), passed by Louis XIV in 1685.

Despite economic difficulties largely related to the carelessness of the French Colonial Administration, the century slavery system lasted for 200 years. This system shaped the Creole society where wealth and racial identity ranked people into three categories: whites, affranchis or freedmen (usually of mixed race), and black slaves. French Guiana remained a poor colony compared to its neighbors, the Dutch and English Guianas, the West Indies, or Brazil.

It acquired relative prosperity in 1770 when, under Governor Malouet, a Swiss engineer named Guisan directed the farming of the flooded lowlands; however, this required a large labor force.

Due to a lack of human capital, the country continued to struggle to achieve economic stability. In 1763 French Guiana had only 7,600 inhabitants. To remedy this, the French Naval Minister named Choiseul decided to organize a large-scale settlement operation: 12,000 people landed in Kourou, unfortunately completely unprepared. Only 1,875 people would survive. From that moment on French Guiana would be struck by the "Kourou syndrome."



/// The term «Maroon» comes from the Spanish word *cimarrón*, a word borrowed from the Arawaks and used to refer to domesticated pigs returning to a feral or wild state. Beginning in 1540, the term has referred to fugitive slaves.

- 1 Carnival in Kourou, Neg'Marrons are groups of men dressed in kalimbé (red loincloth) and coated with molasses. Representing fugitive slaves, they seek to make order of the festival. © ALAIN LLAMAS
- 2 The Prefecture in Cayenne, a former Jesuit residence (1678) © P. STUDER
- 3 Tembe Art © D. BOUIX

The Maroon communities

THE resistance of Africans to slavery led to the formation of rebel groups. At the end of the 18th century the Maroon people, the *Aluku* or *Bonis* from Suriname settled on the French side of the Maroni River and created self-sufficient communities. The *Ndyuka* and *Saramaka* people's independence was recognized by the Dutch in 1760. These communities are known in contemporary French Guianese society as the *Bushinenge*. Today the *Bonis* are pirogue specialists both in the manufacture and the art of navigating the 480 km of the Maroni River. The *Ndyukas* overwhelmingly left Suriname during the Surinamese Guerilla War (1986-1990) and settled in French Guiana. As for the *Saramakas*, though scattered, they have remained linked to their traditional authorities in Suriname.

Tales and Oral

Histories

At the crossroads of African, Amerindian, and European traditions, French Guianese tales borrow from each of these worlds. They often have origins in slave society. The tiger is strong, rich, and represents the master. The macaque is the slave who is still ignorant of European manners. The turtle conjures up the Creole slave and is cunning, with the knowledge of how to make use of the tiger. And even if carnival comes from Europe, here we dance to the sound of African drums. Most themes come from slave culture such as *Jwé farin*, representing a baker, *Zombi baréyo*, a zombie character, *Soussouris*, who represents the bat, cane cutters, or neg-marrons.

The art Tembé

THE origin of the Tembé goes back to the 17th century, with the first slave dwellings in Dutch Guiana. The Tembé is the art of the river and defines the world of Maroon arts. Composed of interwoven geometric drawings strictly constructed with a ruler and compass, it is represented in painting, sculpture, sewing, and embroidery. Tembé can be found in many everyday objects: on *Kopo* (the triangular apex of houses), the door or the front of houses, on the bow or paddles of pirogues. Paintings on wood or canvas have only recently appeared.







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Gold Rush and the Bagne

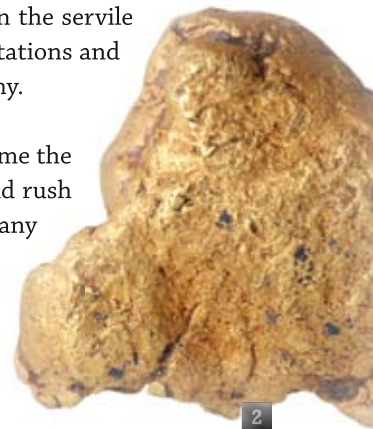
(penal colony)

IN 1848, slaves made up nearly 13,000 of the 19,000 inhabitants of French Guiana.

The abolition of slavery resulted in the servile labor forces' desertion of the plantations and the collapse of an already fragile economy.

During this period of social upheaval came the discovery of gold in 1855, causing a gold rush peaking in 1930. This rush attracted many migrants mainly from the West Indies (Saint Lucia) and put a definitive end to plantations, giving way to small subsistence farms and abattis.

It also caused the emergence of a new Creole society acting as a commercial intermediary between coastal towns and gold mines.



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1 Vestige of the penal colony on the St. Joseph island © FONKYFOX

2 Gold Nugget © CEPHAS

3 The penal colony Hospital on the Ile Royale © ALAIN LLAMAS



The Chinese

THE first Chinese immigrants arrived in French Guiana in 1830. More followed in 1860 and again in 1877. They were meant to work as farm laborers but quickly abandoned field work in favor of trade activities. They went on to gain control of a large part of the local commerce especially in the sales of food and hardware. They continue to have a significant influence on the economy of French Guiana. Some mixed with the Creoles and today, only their surnames still attest to their origins.

The Creoles

DUE to a lack of agricultural workers, the Habitations and their owners disappeared. By 1875 no more than twenty white families still lived in French Guiana. A new culture defined by cultural and racial mixing and/or assimilation sprang up in their wake.

Creole architecture developed thanks to the gold trade. The charm of Cayenne city centre owes much to houses built between the late 19th and early 20th centuries. Predominant not long ago, Creoles represent 1/3rd of the local population today. The Creole community generally lives along the coast and still holds the majority of local political power.

The French West Indians (*Antillais*)

MANY Martiniquais escaped after the eruption of Mount Pelée on March 8th, 1902. A strong Martiniquais community settled at that time in Remire-Monjoly. Today, large French West Indian companies, particularly those specializing in distribution, whose markets have become too limited often expand and set up in French Guiana.

The Lebanese

SETTLED in French Guiana since the late 19th or early 20th century, the small Syrian and Lebanese community makes up for its numbers with a significant socio-economic influence. The first wave came from the Ottoman Empire, others who emigrated after 1945 had lived in Lebanon under French mandate.



Becoming a "Département" and the shift of Jurisdiction

In 1946, under the leadership of Gaston Monnerville, French Guiana became a French overseas department and thus broke off from the colonial regime. The development of the public sector raised standards of living. However, production stayed insignificant and plagued by high costs, insufficient population, undeveloped infrastructure, the economy remained dependent on metropolitan France. Local agriculture, despite successive (often unrealistic) plans, barely modernized. In 1982, following the decentralization law, French Guiana also became a French Overseas Outermost Region (RUP). As a result, much of the regional management and control was transferred to the local government, resulting in French Guiana becoming a more important actor in its own development.

Immigration after 1950

THE transformation from colony to department, the independence of other former French territories, as well as the new Space industry activities and plans aimed at reviving local agriculture have all created a new wave of European immigration. For many, the new arrivals stay lasts only a few years; they are often called "métros" (short for *métropolitain*). Other European immigrants settle on a more permanent basis, often working in agriculture trade, or creating their own business.

The Establishment

of the Space Centre

SINCE 1965, the Guiana Space Centre has developed along the same trajectory as the French Space explorations: first the Véronique sounding rocket, then Diamant B rocket, later on the European rockets (Europa II), then of course the European programme Ariane, and most recently Soyuz and Vega.

The Arrival of the Hmong People

FLEEING from communism and expelled from Laos, many Hmong people found themselves in Thai refugee camps in 1975. The United States welcomed about 100,000 Hmong people and France 10,000. Five hundred Hmong came to French Guiana in 1977. Their current population is around 3,500. They are spread throughout several villages that they built themselves. The first main village is Cacao, created in 1977 in the Roura municipality. The second is Javouhey, created in

1979, 30 km away from Saint-Laurent-du-Maroni on the site of the former leper colony founded in 1822 by Sister Anne-Marie Javouhey. The Hmong produce most of the locally grown fruit and vegetables.



New Waves of Immigration

SINCE 1965, large scale construction projects (Ariane launch facilities, the Petit-Saut dam, road infrastructure), the Surinamese Guerilla War (from 1986 to 1992) and, more generally, a welfare state, free and efficient schools, advanced and generous health care, attractive wages, and the new gold rush have attracted an unprecedented wave of immigration to French Guiana. This immigration is frequently illegal coming from neighboring Suriname, Guyana, and especially Haiti and Brazil. Projections suggest that the population of French Guiana could reach more than 400,000 inhabitants by 2030. Although this does not exceed 2 inhabitants/km², the population density is very unevenly distributed: 95% of the population is concentrated on the coast. More than half live on the "île de Cayenne." The Maroni River region to the west is the second largest concentration while Kourou is the third.

French Guiana, So Rich!

The rainforest in French Guiana flourishes paradoxically on one of the world's poorest soils.



1

IT is home to unique ecosystems that are among the richest but also the most fragile in the world. There are old-growth tropical forests, mangrove swamps, savannas, inselbergs (isolated rock hills) and many types of wetlands. 5,500 plant species have been identified to date, including more than a thousand trees, 740 species of birds, 188 species of mammals, 480 species of fish, 110 species of amphibians and 350,000 species of insects. French Guiana is home to 98% of the vertebrates and 96% of the vascular plants in France. Half of France's biodiversity belongs to French Guiana: 29% of plants, 55% of higher vertebrates (mammals, birds, fish, etc.), and up to 92% of insects!

Even if several protected natural zones have already been created -a regional park, a national park, and six nature reserves- to protect the diverse environment and unique species, a genuine commitment to sustainable development has yet to be established.

If you enjoy nature, you will love French Guiana. Weekends and short trips will be the opportunity to discover the land, whether by short family hikes or trekking in dense forest.

/// Whether camping in the forest or in a *carbet* (an open-air wooden shelter), adopt the *touque* (plastic drums). These containers were originally designed to preserve meat in brine, but today they can be bought in sporting goods stores. Cameras, video equipment, hammocks, and clothes are protected from moisture, rain, and unexpected splashes in the pirogue. Moreover *touques* float.

1 Inselberg © CSG/OV P. BAUDON

2 Guianan cock-of-the-rock mating display © R. JANTOT

3 Camp Canopy © P. STUDER



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Heading east from Kourou

IN Cayenne the Montabo and Bourda paths offer stunning views of the coast and islets. Discover the *Route des plages* (Beach road) that winds along the coast from Remire-Montjoly to the *Degrad des Cannes*, the commercial port. Walk through the *Salines* of Montjoly, continue up to the tip of *Montravel*, and hike the *Rorota* trail. In Matoury, on the way to the airport, don't miss the great *Mahury* trail where you will discover the last primary forest on the edges of Cayenne.

In Montsinéry Tonnegrande, you must taste the mangrove oysters and go for a paddleboat ride around the lake. And why not check out the zoo animals that you may not have a chance to come across otherwise?

In nearby Roura, the Gabriel Creek is one of the prettiest and most visited in French Guiana. The Fourgassié falls offer a refreshing break on the way to the Kaw marshes nature reserve. In the village of Cacao, Sunday is market day. Do not skip a visit to the *Planeur Bleu* museum to learn about native insects and magnificent butterflies. In spring, don't miss the *Rambutan* festival. And celebrate the Lunar New Year with the Hmong.

Since 2004, a road has opened access to Saint-Georges, on the banks of the Oyapock River and the Brazilian border. Don't hesitate to cross the river and breathe in a bit of Brazilian air in the town of Oyapoque. But it's on the French side that you can visit the Maripa rapids, one of the most beautiful in French Guiana.

1 Floating carbet on the Kaw marshes © CSG/OV - C. FEGAR

2 Bridge over the Oyapock River © RONAN LIETAR/IMAZONE

3 The Saline walk in Montjoly © DERF

4 Colorful pirogues at Gabriel creek © ALAIN LLAMAS

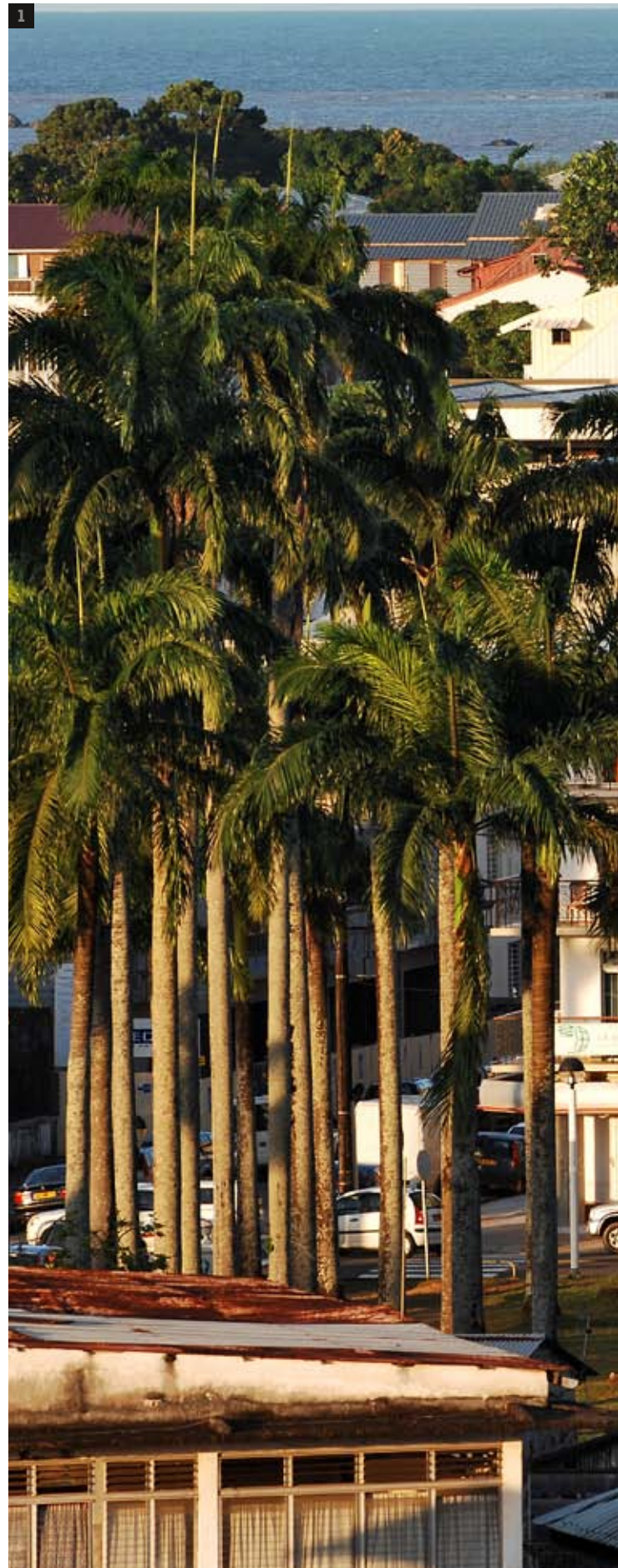
Discover Cayenne

THE administrative centre of French Guiana, Cayenne, is nestled between the estuaries of the Cayenne and Mahury rivers, that's why it's called "île de Cayenne," the "island of Cayenne". Its history begins in the 17th century with the construction of Fort Cépérou designed by Vauban. But it was not until 1821 that a royal land surveyor planned out the right-angled streets typical of the current downtown. If the city turns its back to the sea, it is due to the cyclical coastal erosion. However, you will enjoy walking around the *Place des Amandiers*, the *Pointe Buzaré*, or along the *Vieux Port* (old port), though avoid these places after nightfall. Wednesday, Friday and Saturday are market days in Cayenne. Here you will find an abundance of fruits, vegetables, herbs, Creole remedies, local foods, and crafts at more reasonable prices than in Kourou.

Surrounding the Place des Palmistes, you can see the Prefecture, the former Jesuit headquarters; Jean Martial hospital, awaiting final renovation; the department archives containing relics of Cayenne dating back to the 18th century. In the adjacent streets, you can observe many Creole houses erected in the 19th century. Cayenne contains the finest examples of the colonial architecture typical of French overseas departments.



/// Cayenne is slowly being suffocated by cars. Its infrastructure cannot catch up with population growth, causing customers to migrate from downtown shops to suburban shopping centres.





- 1** The Place des Palmistes © DERF
- 2** Avenue du Général de Gaulle © DERF
- 3** Department archives © D. BOUIX
- 4** The Place des Amandiers © D. BOUIX
- 5** Fort Ceperou, the lighthouse © DERF





Heading west, Sinnamary

SINNAMARY offers plenty of tourist appeal despite being a village of just over 3,000 inhabitants, where residents enjoy a nice quiet lifestyle. It is located about an hour from Kourou and only 10 minutes from the Soyuz Launch Complex.

If Kourou is Ariane's town, Sinnamary belongs to Soyuz. However, the history of Sinnamary is much older than its modern Space endeavours. Recent level-ling works have revealed the presence of humans in the area at least 6,000 years old.

Sinnamary appears in more modern history in 1630 with the establishment of a small colony on the banks of the river that goes by the same name. It's said that Françoise d'Aubigné, the future Madame de Maintenon, second wife of French King Louis XIV, was born here. In 1763, survivors from the doomed Choiseul expedition fled Kourou and settled in Sinnamary. These families, included among them the Horths and Clets, are now some of the most well-known in French Guiana.

During the period of the French Revolution, France exiled a number of political enemies, intellectuals, and priests to Sinnamary. Among those deported here were Billaud-Varenne, Collot d'Herbois, Barbé-Marbois, and General Pichegru who, according to legend, planted the impressive mango trees on the riverside, next to the bridge.

Around 1850 the gold rush and its *placers* (mining of stream bed), with evocative names like *Adieu Vat* (With the grace of God), *Dieu Merci* (Thank God), *Espoir* (Hope), *Perdu Temps* (Time Lost), brought about significant developments in Sinnamary which have since subsided. However, Sinnamary's reputation for its jewellery shops has stood the test of time.

Going upriver from town, you can find the Petit-Saut hydroelectric dam that was constructed in the 1990s. That, as well as the construction of the Soyuz Launch Complex nearby, have brought new financial resources to the local community and have allowed the town to shore up its infrastructure with resources such as a library, a stadium, a pool, a school cafeteria, a fishing port, i.e.

1 Sinnamary © CSG/OV P. BAUDON

2 The fishing dock © CSG/OV P. BAUDON



You'll love strolling along the streets of Sinnamary. You can admire the Creole houses until you reach the banks of the river where you'll find a lovely landscape of *tapouilles* (fishing boats) along the water. If you enjoy hiking or cycling, Sinnamary is the ideal place to have easy access to the great outdoors.

You can discover the nearby swamps at the Yiyi Creek and visit the *Maison de la Nature* (House of Nature) which is run by the *Sepanguy* Association (0594 34 58 53 or 0694 43 11 72). You can take a dip in the *Toussaint* or *Paracou* Creeks or in the clear waters of the *Canceler* Creek, which has picnic tables nearby. If you follow the *Roche Milo*, an old farmland trail, for a mere 40 minutes, you can check out carvings from the Precolumbian period.

At *Pointe Combi*, after passing livestock farms, pasturelands, the *foie gras* producer, and the beekeeper, you can follow a forest trail. It leads to Paracou scientific station belonging to the CIRAD (French Agricultural Research Centre for International Development) and AgroParisTech where they study the ecosystem as well as cocoa and coffee species.

On the Saint-Elie road you will pass by zebu and water buffalo livestock farms. You can hike the nearby botanical walk outfitted with informational signs and stations about the local ecosystem. Try your best to spot the carnivorous *Dosera* plant. And since you've already made it that far, why not spend a night in the Saint-Elie *carbet*?

At one time a vibrant farming area, the *piste de l'Anse*, which connected Sinnamary and Kourou before the national highway was built, will lead you to the mangroves



and the richness of its natural diversity. Don't miss the big blacks caiman at *Ilot Caiman*, where they are bred.

You may also take a pirogue trip at the end of the afternoon to see the red ibises roosting, a must see spectacle at the mouth of the Sinnamary River. Take a boat to visit the Grégoire Creek and Falls or paddle around in a canoe to explore the Toussaint and Canceler Creeks or the Philippon Canal.





There are several accesses to the Sinnamary River. These include *Combi*, *Fontine*, *Pascal*, and *les Pieds dans l'eau* slips as well as the dock at the Petit-Saut dam which opens up access to the immense reservoir lake and leads to the upriver breathtaking rapids.

Petit-Saut holds international status as a significant environmental and scientific site. Make sure to check out *la Maison de la Découverte* (the house of discovery) which was created to promote preservation and sustainable environmental research. It was established when EDF (Electricity of France) constructed the dam. To get there, take the road on your left, about half way between Kourou and Sinnamary..



SHOPPING, DINING, AND ARTISAN CRAFTS

Sinnamary offers several good dining options. Check out the unbeatable *Terrasse du Pakira* on the banks of the river for traditional dishes, the *Oiseau du Paradis* at *degrad Fontine* or *Domaine de Combi* and their home-made *foie gras* specialities.

Sinnamary is renowned for its handcrafted goods and many jewellers still work traditional gold filigree. You can admire their dexterity in the shops' workrooms.



- 1 Creole house © CSG/OV P. BAUDON
- 2 The Yiyi swamp © MARIE WINDSTEIN
- 3 The Corossol craftshop © D. BOUIX
- 4 At the market © D. BOUIX
- 5 Hôtel du Fleuve © CSG/OV P. BAUDON
- 6 Goldring locally crafted © CSG/OV P. BAUDON

Heading further west

PAST Sinnamary, you can't pass by without admiring the frescoes in the Iracoubo church, a masterpiece of naïve art painted by a penal colony convict.

Around Mana, you will discover rice field landscapes and continue towards the Amapa reserve. You will be delighted by the sight of leatherback sea turtles laying eggs on the beaches from April to July or by their eggs hatching two months later.



In Saint-Laurent-du-Maroni you will be amazed by the constant movement of pirogues crossing the Maroni River: there is no bridge to bring you on the opposite bank, in Suriname. Although a ferry provides regular round-trips for cars. This is where you may set off to discover the river for a short trip or one lasting several days up to Maripasoula or beyond.



Thanks to its colonial architecture Saint-Laurent-du-Maroni is one of the most beautiful municipalities in French Guiana. The subprefecture, the gendarmerie (police station), the hospital, or simply the former penal colony staff houses form a coherent and original architectural group. Guided tours of *le Camp de la Transportation* and the former penitentiary administration's headquarters are available through the Tourist Office of Saint-Laurent-du-Maroni (0594 34 23 98).

The trail leading to the Voltaire falls, the most impressive waterfalls of French Guiana, also begins in Saint-Laurent-du-Maroni.

Heading Inland

THE municipalities of Saül and Maripasoula are accessible by air on Air Guyane flights or by pirogue.



Air Guyane Turbolet on the Saül landing strip



1 Iracoubo Church © CSG/OV P. BAUDON

2 Leatherback Sea Turtle © CSG/OV

3 Entrance to le Camp de la Transportation © D. BOUIX

4 Waterfall in western French Guiana © D. BOUIX

Going off the beaten track

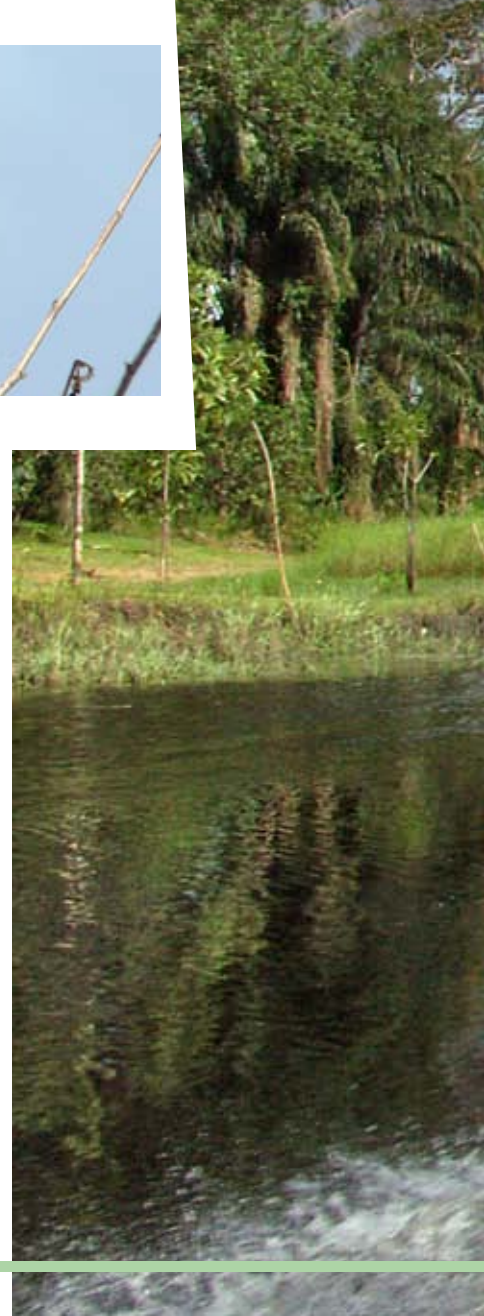
SEVERAL organizations propose nature expeditions. Gepog is for birdwatching, Sepanguy is more general. The updated contact details of these and others can be found on the site www.blada.com. For your family outings, don't leave home without the excellent book by Philippe Boré "Guyane: cultures, nature, loisirs et randonnées" ("Guiana, culture, nature, recreation and hiking," exclusively available in French).

Also, feel free to browse the website of *the Compagnie des Guides de Guyane* (www.guides-guyane.com), either to look up information or to book a stay in the forest for day or week-long hikes in a protected and preserved environment.



French Guiana, still an isolated region

TRAVELING the Pan-American highway, even if it exists on paper, is still quite a trek. Flights to adjacent countries are expensive. The French West Indies are accessible by direct flights, as well as Belem in Brazil. During school holidays, local travel agencies frequently offer charters to popular destinations in Brazil or the Caribbean Islands.



1 The Gabriel Creek © ALAIN LLAMAS 2 Rane Dendrobates © P. STUDER 3 Agelaius icterocephalus © P. STUDER

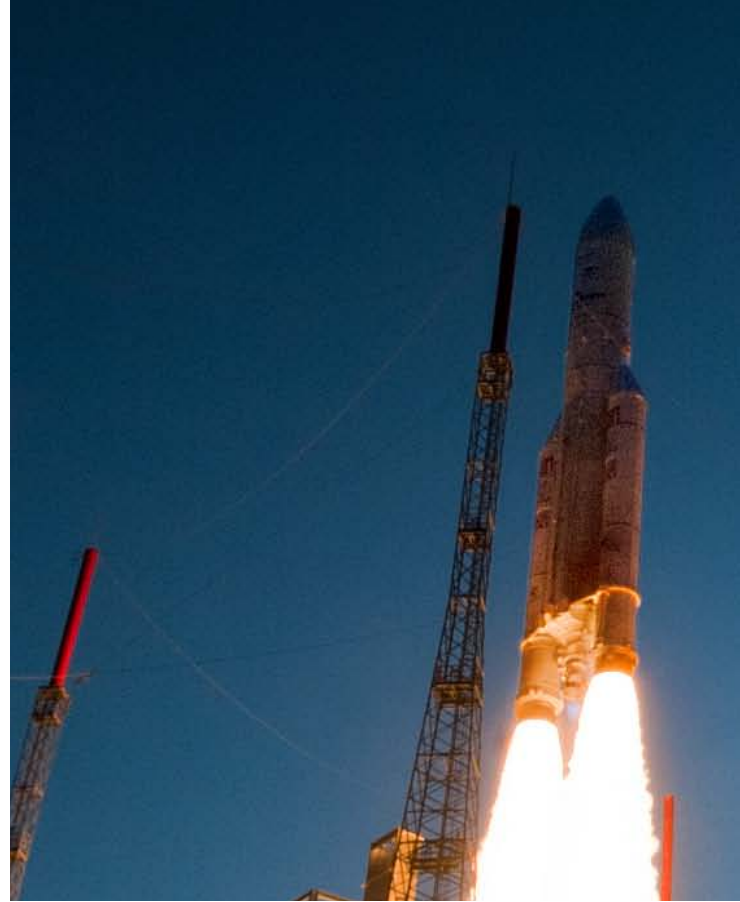
Sources:

- *Atlas de la Guyane* (under the supervision of Jacques Barret)
- *Géographie de la Guyane / Histoire de la Guyane* (Jacqueline Zanzon and Gérard Prost)
- *Histoire générale de la Guyane française* (Serge Mam-Lam-Fouk).



80% of French Guiana's economy is dominated by the tertiary service sector, both in terms of wealth creation and employment.

DESPITE a sharp increase in the number of jobs created in recent years, the supply is not keeping pace with the population and the unemployment rate is greater than 25% of the active population.



A Short Overview of the

Employment can be a hindrance to the decision to move to French Guiana when it involves the loss of a partner's job. Demand is high in the education and medical fields. Construction, civil engineering, and mechanics are also promising sectors. There are of course many specific occupations in which employment is possible even if demand is not high. For a spouse or partner, living in French Guiana can also be the opportunity to revitalize his or her career. In response to family mobility, the *Pôle Emploi* (the state-run employment centre) in Kourou offers facilities and services adapted to individual needs. A detailed assessment of skills (Bilan de compétences approfondi --- BCA) can result in acceptance to a training program and/or a new job.

/// Do not hesitate to contact the Bureau Local des Compétences (BLC) at the Guiana Space Centre at 0594 33 50 53 (email: blc.csg@cnes.fr)



1

Space

THE Space industry plays of course a key role in the French Guianese economy, whether in the fields of industry, facilities management, transportation, construction, or civil engineering. If the Space industry's share in wealth creation is not always easily quantifiable, it is quite clear that its residual economic effects are spread across the entire region. For instance, its direct impact on employment can be estimated, according to INSEE, at about 4,000 direct jobs; 1,700 at the Guiana Space Centre and 2,500 with subcontractors; and 8,000 indirect jobs.

2



The CNES Mission for the Development of French Guiana

ONE of the objectives of the French Guiana Mission is to help business creation and local employment beyond Space-related sectors, by providing its expertise, skills and Networks. Thanks to the Mission, aid has been provided to a cutlery business, a dairy producer, in the promotion of the local plant *Mourea Fluviatilis*, known also as "Salade Coumarou" which interest large cosmetic brands, among many other projects, in the fields of tourism, culture or sport.

3



1 Ariane 5 lift-off © CSG/OV J.-M. GUILLON

2 Yogurt plant in Macouria © JODY AMIET

3 *Maurea Fluviatilis* (Salade Coumarou) © ROGER LEGUEN

Economy





Agriculture

IN French Guiana, agriculture is characterized by the coexistence of traditional farming based on the practice of abattis (slash-and-burn forest plots) and more industrialized highly productive agriculture. The agricultural industry has been growing steadily for nearly 30 years. Land used for agriculture has more than doubled between the agricultural inventory of 1980 and that of 2000.

The production of vegetables and fruit is mainly carried out by the Hmong community. This production covers almost all local need. Up until now, only rice has been an export commodity. However, the local rice industry is in crisis and will probably disappear.

Livestock farming, zebu, buffalo or crossbred species, is advancing but still not sufficient for local need. 70% of the meat consumed in French Guiana is imported and it may be difficult to buy local meat, nevertheless excellent.

The rum distillery of Saint-Maurice that produces agricultural rum (cane juice rum) is the only remaining distillery in French Guiana, compared to 17 at the beginning of the last century. Located in Saint-Laurent-du-Maroni, about 90 hectares of sugar cane are cultivated by the distillery and they sell three types of cane juice rum “la Cayennaise”, “la Belle Cabresse,” and “le Cœur de Chauffe.” They are award-winning and should of course be enjoyed in moderation.



Fishing

THE fishing industry is the leading primary sector of French Guiana. Three commodities are heavily fished in the waters of French Guiana: shrimp, red snapper, and whitefish. However, shrimp exports are in decline because of the resource scarcity related to climatic phenomena, illegal overfishing, and competition from cheaper shrimp farming.



Poorly organized artisan fishermen attempt to eke out a living from fishing along the coast. There is strong competition from illegal foreign fishermen. Whitefish is an abundant and high-quality resource found in the waters of French Guiana. While availability is decreasing both in EU waters and in neighboring countries, stocks in French Guiana are not overfished.

1 Buffalo farm in Sinnamary © ALAIN LLAMAS

2 Artisan fishermen in Kourou © CSG/OV P. BAUDON

3 Fishing boat © ALAIN LLAMAS

Timber

FORESTS cover 96% of French Guiana, representing over 8 million ha (20 million acres). Despite its ecological wealth, it is difficult to economically exploit because of access problems and the low density of desirable tree species. Even if the timber harvest by hectare increased, it would still be below the recommended volumes for low impact logging (25 m³/ha) to preserve the structure and composition of human settlements (65 m³/ha in tropical Asia). The building and civil engineering industries use 80% of locally processed wood which covers only a very small part of the demand for manufactured goods.



1 Saramaca chairs for sale on the road between Mana and Saint-Laurent-du-Maroni © D. BOUIX

2 Aerial view of gold rush site © D. BOUIX





Gold

GOLD is the leading export product (excluding the Space industry) and far ahead of seafood production. Though the fight has been intensified, illegal gold mining remains a serious environmental problem in terms of public health and resource losses. The environmental consequences include illegal deforestation, destroyed waterways, and hundreds of miles of polluted rivers.

The human consequences mean that over 70% of Wayana Amerindian children living on the upper Maroni suffer from heavy metal contamination at levels above WHO norms. Thanks to a new method based on thiosulfate, in the future it will be possible to extract more than 40% of the gold contained in the ore already treated by gravimetry. The overall yield would be around 55% compared to the 25-33% harvested today. The WWF has proposed measure to trace the origins of gold and create labels aimed at informing consumers about their jewelry's origin.

Tourism

DESPITE its warm weather, its ecological potential, and its cultural and scientific heritage, French Guiana has struggled to establish significant tourist demand. *Les îles du Salut* (the Salvation Islands) remain the most visited place in the territory, accounting for more than a quarter of French Guiana's visitors. The second biggest pull is the Guiana Space Centre and its Museum. Finally, the Ariane launches and *le Camp de Transportation* in Saint-Laurent-du-Maroni round out the most visited tourist attractions in French Guiana.

French Guiana: possible oil producer in the future ?

SINCE 2001, a group of oil companies has had a petroleum exploration license allowing for exploration of French Guiana's maritime area beginning at 12 miles from the coast and at a depth of 3,000 meters. Potential oil reserves have been identified .



1 Îles du Salut © DERF

2 Offshore oil platform in French Guianan waters © TULLOW OIL





Culture

As we have seen, French Guiana is not “a green hell” and it is not a cultural desert either. It is spontaneously rich in its various components which provide a melting pot of history, music, and dance.

THIS richness can be found in groups working to preserve their inheritance, and also through contemporary artists who have managed to transcend it to create original works.

There are many artists here who gain inspiration from French Guiana, France, Europe, the Caribbean Islands, Brazil, the United States, and other areas. They share their passions through concerts, exhibitions, courses, and seminars.

In Cayenne, the ENCRE (regional cultural centre) houses the National School of Music and Dance as well as an exhibition and concert hall. Shows are also held at the nearby Zéphyr concert hall.

In Kourou, the municipal school of music offers excellent concerts on a regular basis featuring its students as well as regular or guest teachers.



WEBSITES OF INTEREST:

www.blada.com

www.culture.fr/fr/sections/regions/domtom/guyane

www.ebox973.com

www.guyane.culture.gouv.fr

www.guyane-guide.com

www.infos-guyane.com

www.guyaweb.com

www.plumeverte.fr

www.reflex973.com

www.terresdeguyane.fr

www.redris973.fr

www.97320.com

Research establishments such as the Pasteur Institute, the CNRS (French National Centre for Scientific Research), the IRD (Institute of Research for Development), the agricultural campus in Kourou, and the Université de Guyane assure the presence of academics and top scientists. These institutions and individuals regularly offer to share their knowledge through public conferences both in Cayenne and Kourou.

Every second year the association Cinamazonia organizes a special festival for movielovers. Held in late November, the festival presents feature-length films, short films, documentaries, lectures, and conferences on local and overseas cinema throughout French Guiana.

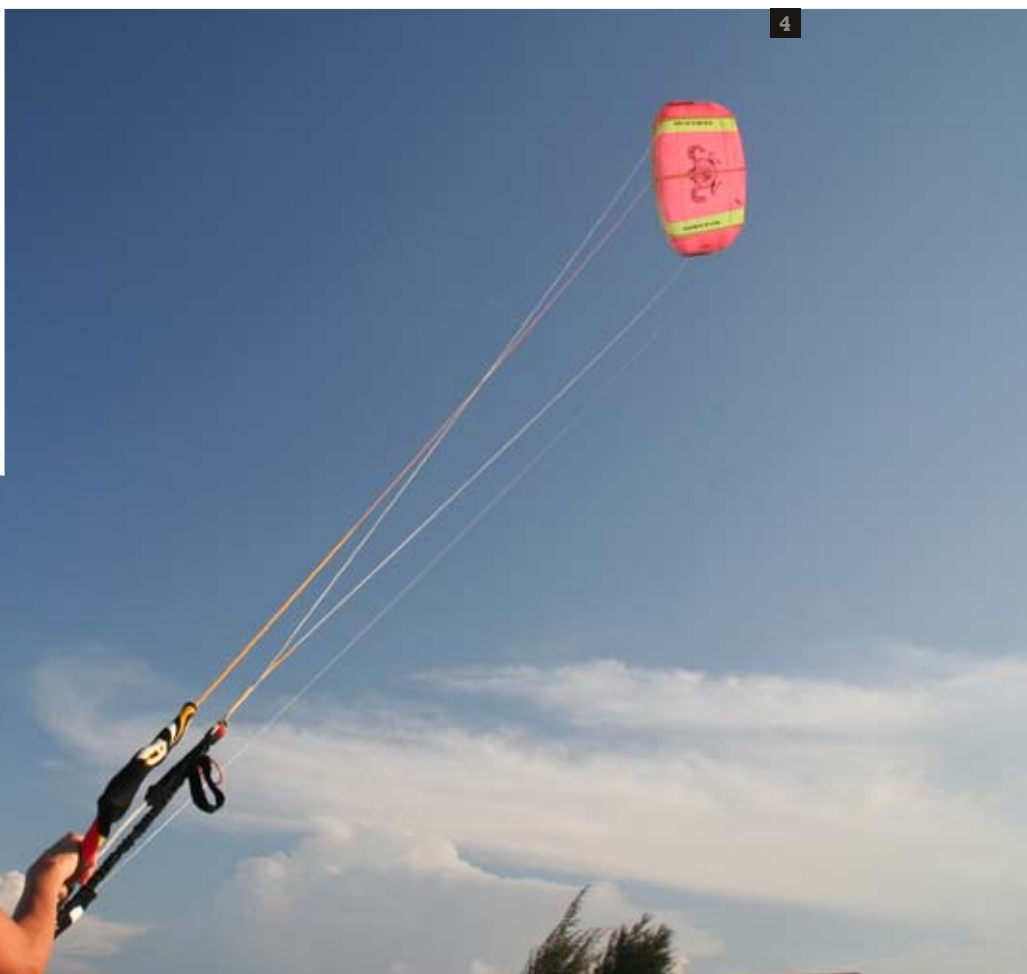
In October, enjoy the biennial Jazz and Blues celebration at the Cayenne botanical gardens: during the Kayenn Jazz Festival you can take advantage of seeing big-name performers and attending one of a kind Guianese musical workshops.

Sports

DESPITE a lack of infrastructure, people in French Guiana love sports.

Do you know of Rames Guyane? It is a solo transatlantic rowing race, between Senegal and French Guiana, held every three years.

- 1 A concert at the Music School of Kourou © A. CERCUEIL
- 2 Patrick Hoyau, winner of Rames Guyane 2009 © J. AMIET
- 3 Football tournament at the CSG field © CSG/OV L.MIRA
- 4 Tour de Guyane cycling race © CSG/OV P. BAUDON
- 5 Kitesurf at Kourou's beach © ALAIN LLAMAS





Carnival

THE arrival of Vaval, the legendary Carnival King, starts the festivities in early January. From Friday evening until Monday morning during 4-9 weeks, the country marches to the rhythm of masquerade balls and street parades. It must be mentioned that throughout the festivities, the speed of life in French Guiana slows to a near stop.

From Epiphany through Ash Wednesday, French Guiana catches the carnival fever.

Friday is the day to eat la *Galette des Rois* (Kings Cake). The one who finds the “bean” is crowned King or Queen and provides another cake flavoured with marzipan, guava, or coconut the following week.

Friday and Saturday nights are devoted to “*bals paré-masqués*” (costume balls) at so-called “universities” –in reality, these are large dance halls that only open at Carnival time.

The “Touloulous” –women wearing highly decorative gowns, gloves, and masks– are the queens of the night. They choose their partners and dance mazurka, biguine, and hot “pikés” to the music of local bands. The men of French Guiana have recently turned the tables by staging “tololo” balls.

Carnival groups strut along to the sound of drums on Sunday afternoons. The costumes are always magnificent whether they are traditional or modern. Carnival ends with the themed parades of Mardi Gras: Monday is devoted to burlesque weddings, Tuesday to Red Devils, and on Wednesday everybody dresses in black and white because Vaval, the king, has died and will be burned on a pyre.

1 Touloulous © DERF



Kourou, between ocean and river, in the foreground, the Pointe des Roches © P. BAUDON



LIVING

in Kourou

*All the practical
information you
may need*

Living in Kourou

Located along the Atlantic coast at the mouth of the river with the same name, Kourou is only 60 km or an hour-long drive from the airport in Matoury and the city of Cayenne.

The History of Kourou

KOUROU appears in the history books alongside the Jesuits. They created a first mission here in 1709 and a second one in 1735 on the *Montagne des Pères* (the Fathers Mountain), which takes its name from them. The missions were founded and directed for 40 years by Father Lombard, who has a street named in his honour. The rock carvings of Carapa can testify to the presence of indigenous Guianese, the Amerindians, preceding the Jesuits by several centuries.

Charles Marie de La Condamine was a French explorer who travelled through Kourou in 1744 after becoming the first European scientist to travel down the Amazon River. He performed measurements to correct the approximate maps of the region and undertook a number of experiments concerning the length of the pendulum swings per second (the oscillation period is not the same at the equator as in Paris). One of the market places in Kourou is called La Condamine in his honour.

In 1762, the Jesuit order was expelled from France and the missions therefore abandoned. Choiseul's fatal expedition to populate French Guiana took place in 1763-1765. Of its 12,000 would-be colonists, 7,000 died within a year due to various diseases, between 2,000 and 3,000 returned to their home countries, and others found salvation on the *Îles du Diable* (Devil's Islands), that were then renamed the *Iles du Salut* (Salvation Islands) as a result.

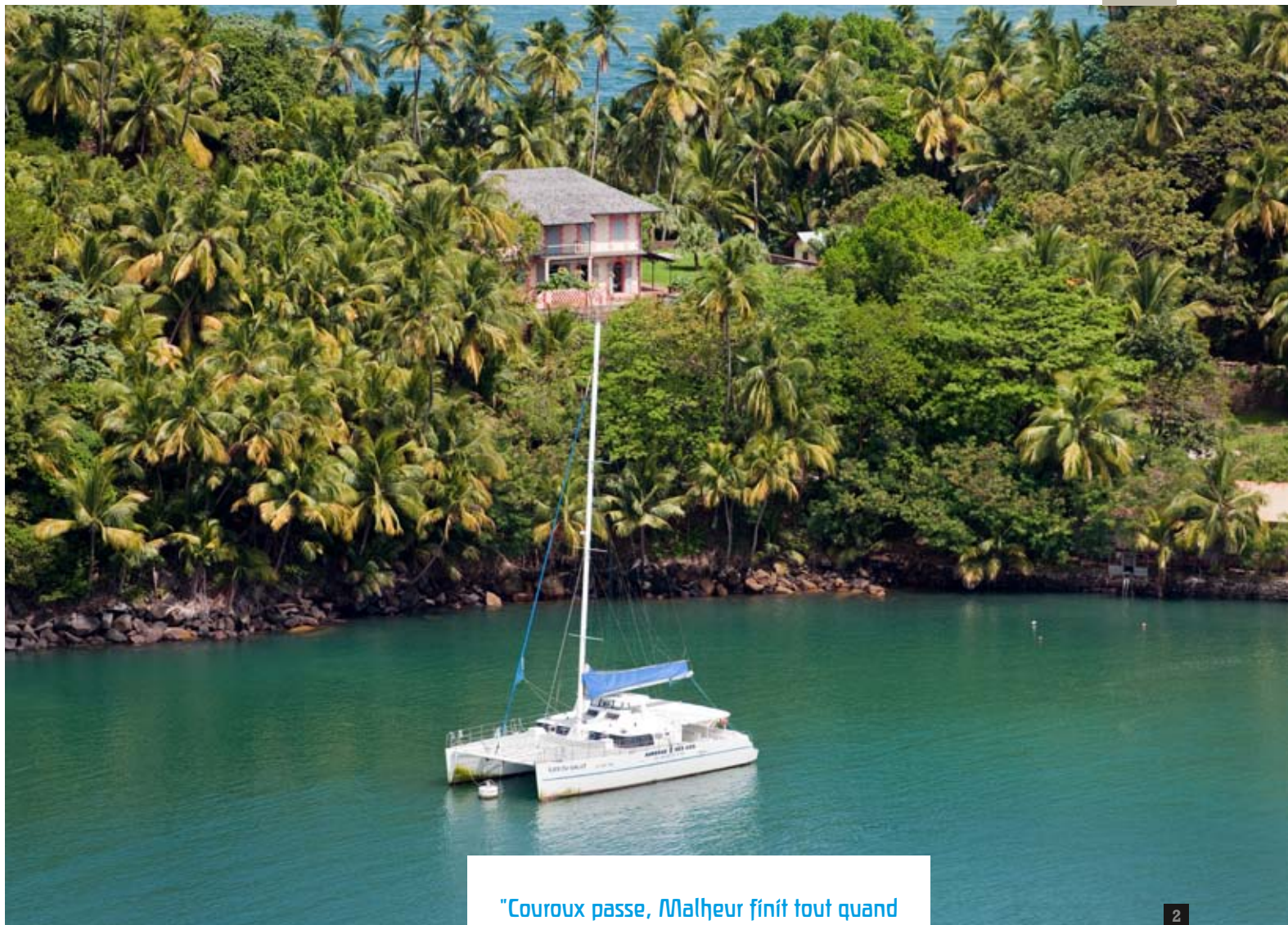
Kourou made the history books again in 1820 when Governor Laussat, who had been the colonial prefect of Louisiana, brought twenty Americans of Irish origin to establish a settlement along the Passoura



Creek. This settlement was fleeting as the newcomers returned to Louisiana after only a year.

It was during this approximate time period that the *Bourg* (downtown) neighborhood of Kourou was developed as we know it today. It was centred around the church and the school run by catholic nuns. A canal was also built to improve transportation between the centre and isolated houses by the marshes.

The next historical development was that of the *bagne* (penal colony) with the *Pointe des Roches* penitentiary, opened in 1856. A hotel by the same name stands there today. The only remnants are a kiln, the Dreyfus tower (it was used as a Semaphore), and a fountain. The part of the *bagne* complex located on the Devil Islands received its first prisoners in 1862 and closed its doors in 1946.



"Courroux passe, Malheur finit tout quand on oeuvre" is the maxim of Kourou :

2

“Rage passes and misfortune comes to an end through work”



3

1 The Dreyfus tower at the Pointe des Roches © CSG/OV P. BAUDON

2 An aerial view of Ile Royale © CSG/OV P. BAUDON

3 Rue du Général-de-Gaulle © CSG/OV P. BAUDON

In the early 1960s, Kourou was still a hamlet of 200 inhabitants surrounded by savannas where about 400 people cultivated crops on their subsistence farms or *abattis* (slash-and-burn plots). Today it is a town situated between river and ocean with a population of over 25,000 inhabitants spread in the different parts of the city:

- ▶ Simarouba came first. The "205" (a community of 205 houses) followed, then Europe and finally Moyoco, Oulapa and Monnerville in the 1980s.
- ▶ The Savane and Roches neighbourhoods were created in the 2000s. The lands were transformed from a *pri-pri* (swampland) by major drainage works, which hollowed out Guatemala cove (across the Kourou river) and the lakes of Kourou: *Bois-Chaudat*, *Bois-Diable*, and *Marie-Claire*.
- ▶ The Vieux Bourg, the historic town centre, is the original village renovated with its beautiful, colourful Creole houses, and is the heart of Kourou's night-life.

Its main street leads pedestrians to the river where boats set off for the "Iles du Salut". The nearby fishermen's dock offers lively scenes: boats supplying the nearby fish market being closely watched by *urubus*, the black vultures.



The relatively low buildings (nothing over three-storey in Kourou) make for a particularly pleasant and convivial town. The consequence of this city planning as well as the lack of a true town centre can sometimes result in long distances between one point and another; a car is essential, even if the bravest can, of course, ride a bicycle. A bus service has now been introduced.



Accommodation

IN light of the town's rapid population growth, it can be difficult for newcomers to find accommodation in Kourou. However, employees of the Guiana Space Centre, due to their mobility status, benefit from a higher priority than other *Kourouciens* (residents of Kourou).

The UEBS, *Union des Employeurs de la Base Spatiale* (Base Employer-Union) companies guarantee their employees individual or collective accommodation at a reasonable rate based on their family status.

These dwellings, located in more recent areas of Kourou, are furnished (with furniture and household appliances) and have standard amenities in terms of comfort and safety.



REAL ESTATE AGENCIES PRESENT AT KOUROU

Simko	☎ 0594 32 10 34	☎ 0594 32 29 95	simko.immo@simko.fr	33, rue Jean Jaurès
Carol Immo	☎ 0594 32 95 44	☎ 0594 32 97 76	www.carol-immo.com	5, rue du Lycée
Guy Hoquet	☎ 0594 32 20 20			Avenue Victor Hugo
Oceanic Immobilier	☎ 0594 32 40 83		www.oceanicimmobilier-guyane.fr	17, impasse Toutouri

Security

LIKE many places, French Guiana has not been spared from rising crime rates. Crime here is exacerbated by significant social disparities and a large youth population lacking occupation.

Companies operating at the CSG have been combating this problem for several years and ensure that all employees' houses and apartments are secure.

Through your company you can have an alarm installed at a reduced rate offered by a private security firm that also provides nightly patrols in different neighbourhoods around Kourou.

However, here more than elsewhere, you should take the following precautions:

- Notify your neighbours when you'll be out of town. If you're leaving for longer than the weekend, notify the alarm company and the police
- Make sure your mail is collected from your mailbox
- Avoid visible signs of wealth such as valuable jewellery
- Do not walk alone or in isolated places, particularly after dark.

1 Fishermen's wharf © CSG/OV P. BAUDON

2 Espace Diamant © CSG/OV

3 Le Vieux Bourg, rue du Général de Gaulle © CSG/OV P. BAUDON

4 Zulemaro public garden © CSG/OV P. BAUDON

Kourou, an outdoor town

FROM the *Pointe des Roches* to the *Pointe Charlotte*, the golden sandy beaches stretch for several kilometres: sand castles, fishing, kite surfing, beach volleyball, football, or simply relaxing, there is room for everyone, even if the silt-laden waters and the sometimes growing mangroves are hardly incentives for swimming.

Depending on the season, you can observe migratory birds and may even catch a glimpse of a manatee or a group of dolphins in the river estuary.

Kourou is a town for sporty people.

You will come across runners and walkers, some keeping in shape, others training for the now famous *Marathon de l'Espace* (Marathon to Space) which takes place the third Sunday of March (www.toucan-athletic-club.com).

From the youngest to the oldest, everyone can find a convenient activity in Kourou and can play or practice it in a relaxed and friendly atmosphere.





/// Aero-modeling, aikido, archery, athletics, automotive, aviation, badminton, baseball, basketball, bowling, boxing, French kickboxing, canoeing, capoeira, cricket, cycling, ballroom, jazz or traditional dancing, diving, fencing, fishing, football (soccer), golf, gymnastics, handball, horseback riding, jiu-jitsu, judo, karate, kite surfing, motorcycle, motocross, quilting, petanque, qi gong, rugby, sailing, squash, table tennis, tennis, clay pigeon, pistol and rifle shooting, ultralight aviation, volleyball, water skiing, yoga, etc.

1 Marathon de l'Espace © CSG/OV JM. GUILLON

2 Kite surfing © ALAIN LLAMAS

3 Kourou beach, sand sculpture contest © BLADA

4 Kourou beach at low tide © ALAIN LLAMAS



As for suggestions: the youngest children may want learn judo or tennis, they can continue with aikido, squash, fencing, or dancing. Those who prefer team sports can join a football, volleyball, handball, or rugby club.

The riding school and stables in the surrounding area will satisfy horse and pony lovers, while those interested in nature can go on outings organized by Sepanguy (www.sepanguy.com) or by Gepog (www.gepog.org), two local associations promoting environmental protection and exploration.



Golfers will be pleased to find the 13-hole *Golf de l'Anse* (05 94 32 63 02) and the 9-hole golf course *des 3 Collines* (3 Hills) in Matiti (0594 38 45 63).

If you dream of sailing away, call the nautical school (05 94 32 57 65). If you have a burning desire to fly: planes (0594 32 09 66) or ultralight aviation (0594 32 25 71) are waiting for you at the aero club.

You can learn to dance rock, waltz or salsa. You can try capoeira, a Brazilian martial art that has roots in the warfare and dances of African peoples during the period of slavery.

Teens may gather at the skate park (next to the beach) or at the municipal swimming pool (swimming lessons, water aerobics, and diving: 05 94 32 44 83).

As for the artists, either beginners or more advanced, they can join the *Grain d'Art* Association (0594 32 64 19), the *Atelier d'Artistes* (0594 32 46 23) or the *Tembé* art studio (*Libi Na Wan* Association, libinawan@wanadoo.fr).

Intellectuals may join the bridge, scrabble, or chess clubs.

Nearly all the information on clubs and associations in Kourou and French Guiana can be found on the website www.blada.com/associations.

And brace yourself, all of these activities as well as many others are within less than five minutes of your home!



/// Once a month, the CSG opens its savannas classified as ZNIEFF (Natural Area of Ecological, Flora and Fauna Interest) to allow people to tour a protected area while accompanied by a guide from the ONF (National Forests Office).

Kourou Accueil (Kourou welcomes)

Feel free to join this association, a member of "Accueil of French Cities," where you will find a friendly place to exchange skills, take language and literacy courses, make some crafts, and many other activities (see Facebook page "Kourou Accueil" for more information).

Kourou Accueil organizes a well-attended public garage sales in June and December.



1 Aero club © ROLAND JANTOT

2 Pony riding at the riding school © BOUIX

3 Squash Club © ALAIN LLAMAS

4 Savanna path © CSG/P. BAUDON

Culture

THE CULTURAL CENTRE

The impressively large cultural centre stands at the edge of Lake Bois Chaudat. This municipal property houses associations as well as the multimedia library.

According to schedules, children, teenagers, or adults meet there. Among others, there are a library, music studios, a dance hall, free internet access, a cinema club at your disposal.

MUSIC

The municipal music school welcomes children and adults and offers lessons with one of its 30 teachers in traditional and classical music, choir, and vocal techniques.

CINEMA - THEATER

A cinema is located in Simarouba. To find out which films are being shown, look at Urania Facebook page, call 0594 32 32 32 or subscribe to the newsletter.

In Macouria, a 20-minute drive from Kourou, the Guianese Theatre Company offers theatre Thursdays.

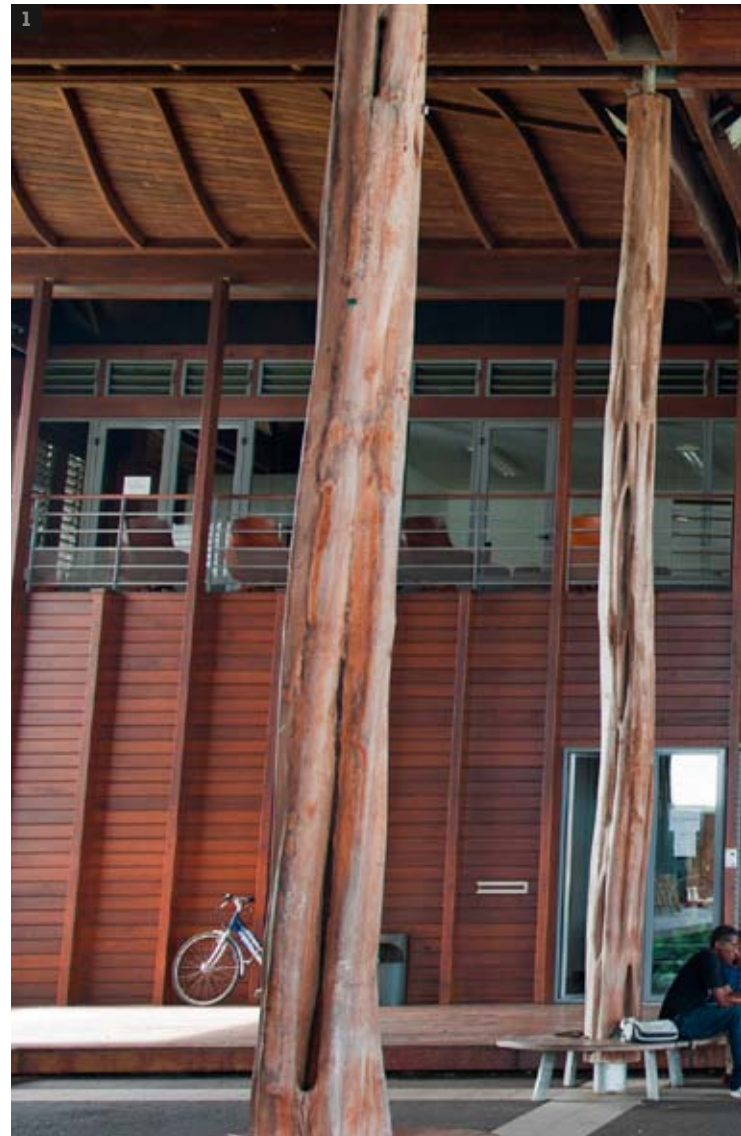
SCIENCE

The Guiana Space Centre can be visited along with the Space Museum (0594 32 61 23).

MEDIA

Television in French Guiana is broadcast by TNT (digital terrestrial television) and offers eight national channels, and three local TV channels.

National channels are however set on the schedules in the West Indies (one hour time difference). Many people prefer to subscribe to satellite TV (Caribbean CanalSat package), but this requires a large satellite dish.



RADIO

THE MAIN FREQUENCIES ON THE FM BAND

92.8 / 98.0	RTL 2 Guyane
94.0	Guyane 1ère
95.3	NRJ Guyane
96.5	Métis FM
99.6	Nostalgie Guyane
101.3	Radio Peyi Guyane
104.0	France Inter
106.6	Chérie FM Guyane



PRESS

- France Guyane: daily news
- Une Saison en Guyane: biannual publication focusing on the environment and people across the Guiana territories.

National weekly newspapers are delivered by air with an extra cost, the monthly ones arrive at stores with a delay.

1 Cultural centre © CSG/OV P. BAUDON

2 Making a «Ciel de Case» © BLADA

Around Kourou

Kourou is the departure point for many remarkable excursions.

YOU can set off from Kourou on an hour-long boat ride to the CNES-owned *Iles du Salut*, a tiny tropical paradise. The animal species reintroduced on the island will offer plenty of opportunities to take some great photos. You may see macaws, monkeys, and agoutis. You can also swim in the sheltered area, but in any case, be careful of the strong currents surrounding the islands. It's also an ideal spot for fishing.

The vestiges of the penal colony -the cells, the chapel, the hospital, or the children's cemetery- remain a striking reminder of the past. Many of the buildings on Royale Island have been renovated and *le Conservatoire du Littoral* (Coastal Conservation Authority) has transformed what was formerly the prison director's house into an interactive exhibition space.

On St. Joseph's Island, the terrible open-sky cells have been swallowed up by nature.



3
Closer to town, the pedestrian walk around the golf course begins right next to the Jupiter Control Centre, and Museum. The trail snakes between golf greens and it's common to see a few of the bolder animals and some fairly remarkable birds.

The petroglyphs of Carapa are a symbol of Kourou's more ancient history. They are made up of amazing rock carvings and surfaces used to sharpen tools and weapons.

The Montagne des Singes (Monkey Mountain), which peaks at 160m, is a 20-minute drive from Kourou along the *Piste du degrad Saramacca*. A botanical trail brings hikers to the top of the mountain in about one hour. There, you will enjoy a magnificent panoramic view. It's also an ideal place to watch an Ariane launch.



The Saramacca Road, which offers some accesses to the Kourou River, also features several open-air restaurants serving local food.

At the weekend, Kourou residents head to *le carbet*. Imagine a riverside clearing with a basic shelter where you can practice the arts of napping in a hammock and drinking Ti-Punch cocktails.

Many companies have their own *carbet* and, if you have the courage, you can acquire or even build your own (request a plot from the ONF, the French National Forests Office).

You can find additional information on the site www.escapade-carbet.com.

Many tourist-oriented camps on the Kourou River and its tributaries have been opened by people passionate about the forest. Camp Cariacou or Wapa Lodge offer kayak tours, night expeditions, and hikes—you'll discover a thousand secrets about the forest. You'll sleep in a 16m-high tree lodge at Camp Canopee. The Papakai Association's carbets are located at Saut Léodate, where you'll get an introduction to the Saramacca culture.



Shopping

The local market in French Guiana is undergoing a complete transformation. More and more products from mainland France are now also available here.

HOWEVER, due to the great distance and the market size, the prices are noticeably higher than in continental Europe. That being said, your salary will reflect this gap. While French Guiana is not subject to VAT, it is replaced by a local tax called the *octroi de mer* of a similar value.

Many popular stores can be found here: Carrefour and Geant Casino are the large supermarkets; Super U, Leader Price, and Huit à Huit are the local grocery stores; But, Darty and Habitat sell furniture and household appliances.

And you can't easily get by without one of the peculiarities of French Guiana, *le chinois* or Chinese store (the equivalent of the traditional corner shop). These small shops are open late into the evening and are a veritable treasure trove of goods –you'll find a little of everything here, and there's one around every corner.



Note that many shops close for the afternoon until 3 or 4pm. Early afternoon is often a good time for a nap.

THE MARKET

In the Vieux Bourg (Kourou's historic downtown), you'll find the fruit and vegetable market, from Monday to Saturday, except on Tuesdays when the vendors set up their stalls at the Place de la Condamine.

It's here at the market that you'll be able to taste the local fruits: sweet and juicy pineapples, rambutans at the beginning of the year, passion fruit, papayas, shaddock –*Citrus maxima*, a large pomelo– and many other seasonal options. You can choose between about a dozen banana varieties. You can also discover new spices, yardlong beans, *sorosis* or bitter melon, and okra.

The kids will beg you to stop at the *sinobol* stand (called after the English snow ball). The vendor shaves a large brick of ice and splashes the syrup of your choice on top. It's a cross between a sorbet and an iced beverage and it's quite refreshing. As a snack the kids may have a *sispa* cake made from cassava and coconut.

You can find the fresh fish market on the Kourou river banks at the end of the main street in the Vieux Bourg. It's open Monday to Friday from 7:30 a.m. to 1:00 p.m. and 4:00 p.m. to 6:00 p.m. as well as Saturday mornings.



The fishermen are happy to help you select from the excellent local fish such as weakfish, bar, giant grouper, king mackerel, shark, and, of course, the delicious French Guiana shrimp.

On market days, don't hesitate to sample some of the prepared Creole, Laotian, or Peruvian take-away dishes. And if you want to eat out in Kourou, you will have a plethora of choices: French Guiana, on account of its diverse population, has embraced many cuisines from around the world and small restaurants are numerous.

However, you must try some of the Creole specialties including *blaff* or *fricassée*, and don't miss the Easter specialty *bouillon d'Awara*.

It's said that once you eat this dish, you'll come back to French Guiana.

The sandwich shop at Place Monnerville or the many food trucks set up throughout town will get you out of a bind if you're hungry and in a rush (the *super madras* is a must-try) and for those who can't do without, Kourou has a McDonald's as well.

If you have a sweet tooth, you can find the best sorbets in Kourou at the local ice cream parlor (le Glacier).

4 local vegetables © D. BOUIX **5** Fish stalls © SCG/OV P. BAUDON **6** Food truck selling sandwiches © D. BOUIX



Highlights of the year

Carnival: From Epiphany at the beginning of January to Ash Wednesday, carnival lasts between 4 to 9 weeks. In Kourou *la Parade du Littoral* (the Parade of the Coast) features groups from French Guiana, the French West Indies, Brazil, and more.

Le Marathon de l'Espace (Marathon to Space) : This running event takes place annually on the 3rd Sunday in March. It stretches between la Pointe des Roches, where the Kourou River meets the sea, and the Launch sites at the CSG.

La Fête de Camerone (Camerone Festival): With this festival, the French Foreign Legion commemorates a heroic battle that took place in the small Mexican village of Camerone on April 30, 1863.

At the 3rd Regiment of Kourou, this celebration translates into a fair at the Forget military base, an event that children and adults alike look forward to every year.

Les Maîtres de la Pagaie (The Masters of the Paddle) is a traditional pirogue race held in October.

La Marche de Kourou (The Walk of Kourou) is a popular 10 kilometre walk to promote physical exercise held the last Sunday of October.

La Fête patronale (Patron Saint Festival): Celebrations abound in Kourou for or near November 25th, the feast day of St. Catherine, Kourou's patron saint.



2



3



4



5

1 The Masters of the Paddle © CSG/OV JM. GUILLON

2 The Marathon to Space © CSG/OV

3 Carnival © DERF

4 Saint Catherine's Church in the historic downtown © CSG/OV

5 Camerone Festival: combat training course for kids © CMM 3e REI

Your Children and their Education

THE proximity of the beach, the outdoor activities, and the relaxed rhythm of life in French Guiana will all help your children thrive.

Kourou has a well-established educational and extra-curricular infrastructure and all levels are catered to.

YOUNG CHILDREN

You can opt to place your pre-school children in one of the town childcare establishments:

- The Municipal Nursery has 60 places.
- The Family Nursery (40 places) groups together a network of child-minders that operate out of their own homes. They can also care for school-aged children after school, on Wednesdays, and during school vacations.

There are also a few private kindergarten:

- La Dorlotine cares for children aged 2,5 months to 2 years and also offers afterschool care for kids up to 8 years old who attend the Eustase Rimane pre- and primary school right around the corner.
- La Marmotine then takes over for children 2-3 years old. They also offer afterschool care for pupils at Maximilien Saba and Emile Nézes schools.
- Le Néoclub des Petites Frimousses welcomes children 1-6 years old for pre- or afterschool care.



1 La Dorlotine © CSG/OV P. BAUDON

2 At la Marmotine © CSG/OV P. BAUDON

2 The Maripa cafeteria © D. BOUIX



CONTACT INFORMATION

NAME	ADDRESS	PHONE
Family Nursery	4 bis rue Léon Stanislas	05 94 32 02 04 crechefamilialekourou@orange.fr
Municipal Nursery	62 avenue des Roches	05 94 32 14 19
La Dorlotine	47 avenue Hector Berlioz	05 94 32 19 23
La Marmotine	Place de l'Europe	05 94 32 53 11
Le Néoclub des petites Frimousses	10 rue Serge Canut	05 94 32 80 52

KINDERGARTEN AND ELEMENTARY SCHOOL

Kindergarten: 3 years

(petite section, moyenne section, grande section)

Elementary School: 5 years (CP, CE1, CE2, CM1, CM2)

The parents' home address as well as the number of vacant spots determine the schools that your children attend. To insure a place at the school nearest to your house, sign up your children as early as possible. The administrative formalities must be completed at the Town Hall (*Mairie*), Avenue des Roches (at the back of the courtyard).

Vie scolaire et Caisse des Ecoles (Office of Schools and Scholastic Life), phone: 05 94 22 81 05

The administrative forms that must be completed can be obtained from the *Vie Scolaire* and must be accompanied by the following documents:

- A proof of address form no older than 3 months (housing rental receipts, electric bills from EDF) or a certificate signed by your employer.
- A removal from school registry form (for children who have already been enrolled in school elsewhere).
- A medical certificate (for children entering school for the first time).
- A copy of the family record book or a copy of an official ID or of the birth certificate.
- A ID photo and a self-addressed stamped envelope.

LE COORDINATE

NAME	ADDRESS	PRE-SCHOOL	ELEMENTARY SCHOOL
Émile NEZES	Place Newton	0594 32 01 26	0594 32 11 85
Eustase RIMANE	Rue Louis Armonstrong	0594 32 20 57	0594 32 02 81
Maximilien SABA	Rue des Cavaliers	0594 32 48 25	0594 32 48 38
Michel LOHIER	Cité des 205	0594 32 12 08	0594 32 10 99
Olive PALMOT	Quartier Cabalou	0594 22 87 84	0594 22 87 84
Raymond CRESSON	Impasse Samuel Beckett	0594 32 48 53	0594 32 57 00
Roland LUCILE	Cité Wacapou	0594 32 15 06	0594 32 01 68
Savane	Rue Léopold Sédor Senghor	0594 32 94 08	0594 22 39 96
Solange PATIENT	Square du Père Lombard	0594 32 10 32	0594 32 10 32



DAYCARE CENTRE

The daycare centre cares for children during school vacations and on Wednesdays. For more information call the *Vie Scolaire* office at 05 94 22 81 02.

SCHOOL CAFETERIA

You won't waste a lot of time fighting traffic in Kourou, which is an undeniable advantage for many families who eat lunch together.

In the meantime, children who can't go home for lunch can eat a meal at the *Maripa*, the school cafeteria located at Eustase Rimane school.

Kindergarten children eat lunch at their schools. Elementary school students at E. Rimane, O. Palmot, O. Compas, R. Cresson, S. Patient, and Savane have cafeterias at their schools. Pupils from other schools take a bus which brings them to the cafeteria at E. Rimane.

MIDDLE SCHOOL

4 years (6e, 5e, 4e, 3e)

Diploma: Brevet des Collèges

Enrollment in middle schools is also determined by your home address and optionally by the student's foreign language choice as well as other various options. Don't hesitate to direct any questions to specific middle schools.

→ Collège Henri Agarande

Avenue des Iles - BP 722 - 97387 Kourou Cedex
Phone: 0594 22 33 33 - Fax: 0594 22 33 30
Email: ce.9730125Y@ac-guyane.fr

→ Collège Victor Schoelcher

11, avenue de Pariacabo - BP 728 - 97387 Kourou Cedex
Phone: 0594 22 07 22 - Fax: 0594 32 61 06
Email: ce.9730237V@ac-guyane.fr

→ Collège Omeba Tobo

Rue Stanislas Léon - BP 719 - 97387 Kourou
Phone: 0594 22 33 33 - Fax: 0594 22 33 10
Email: ce.9730306V@ac-guyane.fr

→ Collège Joseph Ho Ten You

Route Départementale 16 - BP 731 - 97387 Kourou Cedex
Phone: 0594 32 37 70 - Fax: 0594 32 34 39
Email: ce.9730483M@ac-guyane.fr

/// For reasons of equality, middle school students wear a signature colour. Name brands are not allowed.

– Students who attend Henri-Agarande wear green tops (red for sport) and blue trousers.

– Victor-Schoelcher students wear light blue tops (yellow for sport) and dark blue trousers.

– At Omeba-Tobo they wear white tops and blue trousers.

– Orange is the t-shirt colour chosen by the newly opened Collège Joseph Ho Ten You





Where do the school names come from?

- Raymond Cresson, Roland Lucile, Olivier Compas, and Emile Nézes were teachers in Kourou, along with Solange Patient
- Maximilien Saba was also a teacher but is better known for his skill as a musician (1875-1957).
- Michel Lohier, teacher and historian was the author of the book “*Legendes et Contes de Guyane*” (*Legends and Tales of French Guiana*) (1871-1973)
- Eustase Rimane was Kourou’s mayor for over 40 years (1953-1995).
- Olive Palmot was a key player in advancing youth social action in Kourou.
- Henri Agarande was a secondary school professor and served briefly as a senator of French Guiana (1920-1983).
- Victor Schoelcher was the French deputy who initiated the decree of April 27, 1848 which abolished slavery (1804-1893)
- Gaston Monnerville (1897-1991) was a lawyer, French resistance fighter, a deputy, and then a senator of French Guiana before becoming President of the Senate (until 1968), and member of the Constitutional Council (until 1983).
- Elie Castor was Sinnamary’s mayor (1977-1993), president of the general council, and deputy of French Guiana (1981-1993).
- Joseph Ho Ten You was also a President of the General Council (from 2001 to 2004)
- Omeba Tobo means “place of learning” in the Kali’na (indigenous) language.

1 School letting out at Henri Agarande secondary School © D. BOUIX 2 Nézes School © D. BOUIX

HIGH SCHOOL

3 years (*seconde, première, terminale*)

Diploma: *Baccalauréat*

⇒ Lycée Gaston Monnerville

Technology and General Studies

Rue du Lycée B.P. 712

97387 KOUROU CEDEX

Phone: 05 94 32 82 00 – Fax: 05 94 32 82 06

⇒ Lycée Professionnel Elie Castor

1 contre allée boulevard Bellony – B.P. 803

97388 KOUROU CEDEX

Phone: 05 94 22 36 94 – Fax: 05 94 22 32 36

The Elie Castor Vocational High School offers coursework in woodworking, cooling and heating, business, social studies, and hotels and hospitality.

⇒ Lycée Professionnel de Matiti

Avenue Henri Kong– PK 40 Savane de Matiti

97355 Macouria Tonate

Phone: 05 94 38 76 26 – Fax: 05 94 38 76 25

Email: lpa.macouria@educagri.fr

Located between Kourou and the village of Macouria, this agricultural high school offers secondary education programs leading up to a Brevet de Technicien Superior or BTS (a 2-year vocational training certificate).



HIGHER EDUCATION

Gaston Monnerville High School also offers BTS degrees in industrial maintenance, tourism, business accounting, and business management.

⇒ IUT de Kourou (Kourou Technical College)

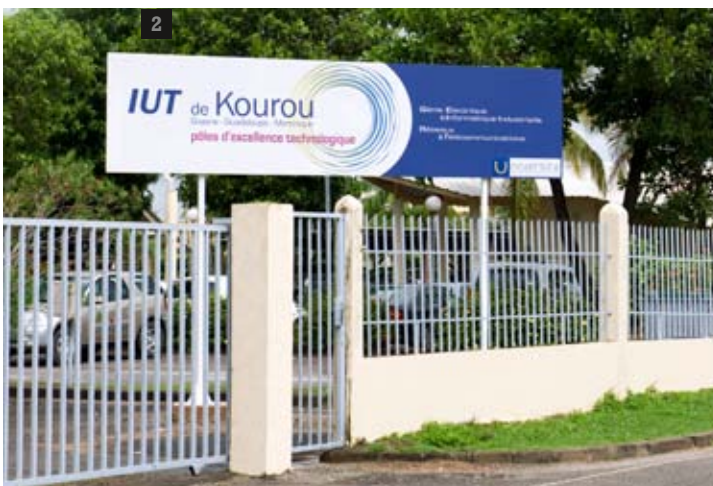
Address: Avenue Bois Chaudat – Quartier Branly

Phone: 05 94 32 80 00 – Fax: 05 94 32 22 63

- DUT in GEII, a 2-year technical degree in electrical and industrial information technology (can be completed in traditional or block release training program).
- DUT in R&T, a 2-year technical degree in networks and telecommunication.

The university system in French Guiana consists of the *Institut d'Enseignement Supérieur de la Guyane* or IESG (higher education institute), of an IUT (2-year technical college), continuing education programs, and a UFR (French medical school) branch.

/// More and more educational programs are being developed. For additional information, consult the website for the University of French Guiana (www.univ-guyane.fr) as well as that of the French Guiana Regional Educational Authority in Cayenne (www.ac-guyane.fr, phone: 05 94 30 39 05), and don't hesitate to contact the educational establishments directly.



1 Practical training at the IUT © CSG/OV P. PIRON

2 IUT entrance © CSG/OV P. PIRON

3 Late afternoon on the Kourou beach © BOUIX

4 Mosquito *Aedes Aegypti* © JAMES GATHANY

Health

It is highly likely that the only visits you'll make to a doctor in French Guiana will be for common problems you might encounter anywhere. Back to back colds, flu strains, and bronchitis are less common here due to the year-round summer weather. The sunshine and outdoor living will do wonders for you and your children.



3

Don't forget that French Guiana is a French overseas department that abides by all French and European norms. It thereby benefits from the same network of medical facilities and health professionals as mainland France.

MOSQUITOES

Even if the mosquitoes are generally less bothersome in Kourou than in many other areas in summer, new arrivals are often sensitive to bites. Apply a soothing cream to prevent from scratching yourself and don't let bites become infected.

Protect yourself by using insect repellent and wear long, light-coloured clothing in the evenings.

Most of the houses in Kourou have windows protected by fly screens. When camping or otherwise sleeping outside, use a mosquito net treated with insecticide (to be found at the pharmacy)

To prevent mosquito proliferation, eliminate any reservoirs of standing water where mosquitoes might reproduce. Regularly change the water in vases as well.

Unfortunately, as in most tropical countries, mosquitoes can be vectors for infectious diseases: malaria, dengue fever, chikungunya, zika, yellow fever.

MALARIA

Malaria is only highly present in a few areas of French Guiana, mostly on the upper Maroni and upper Oyapock rivers. The principal precaution to take against it is to protect against bites. The protective measures mentioned earlier can be accompanied by preventative medical treatment based on your planned excursions.

Discuss these treatments with your general practitioner in Kourou. He or she will be the most capable of advising you due to an acquired local knowledge.

During your stay on the coast or on any trips to uninhabited areas, taking preventative medication is not recommended. Malaria is strictly a human disease; the Anopheles mosquito primarily feeds during dusk.

In case of high fever, even if you have preventative medicine, consult your doctor right away.

DENGUE FEVER, CHIKUNGUNYA, ZIKA

All three of them are viral diseases transmitted by Aedes mosquitoes.

The symptoms resemble those of the influenza: high fever, soreness, headache, and acute fatigue. Chikungunya is accompanied by joint pains which can last weeks or months. Zika represent a danger only for the development of the fetus, during the first months of pregnancy.

There is neither a vaccine nor one specific treatment. To control the symptoms, take paracetamol and no aspirin to avoid any risk of haemorrhage.

YELLOW FEVER

Like dengue fever, yellow fever is an arbovirus and is transmitted by the Aedes mosquito. Due to a good overall vaccination rate (yellow fever is the only specific vaccination required to travel to French Guiana), there hasn't been a reported occurrence for many years.



4

SUNBURNS AND THE HEAT

French Guiana is at northern latitude of 5°. Don't underestimate the sun's strength this close to the equator. Wear protective cotton clothing as well as a hat and sunglasses, regularly apply sunblock. Children especially should avoid the beach and pool during the hottest hours of the day. Hydrate regularly.

Adapt your exercise routine and other physical activities to the specific weather conditions. Athletes should expect to double their recovery time and should always drink plenty of water.

Don't hesitate to take a nap if you have the opportunity, and make sure you try out napping in a hammock.

AIDS (SIDA IN FRENCH)

The appeal of the exotic can be seductive. Here, as elsewhere, condoms are the only effective barrier against AIDS and other STDs.

PESTS

You won't often see spiders, wasps, scorpions, or centipedes. And if you do, they generally keep their distance.

Ants, on the other hand, are ubiquitous and come in all of sizes—the smallest being perhaps the most ferocious. As a general rule, you shouldn't walk around barefoot but, if you do, watch your step!

The grassy savannas can be home to *poux d'agoutis* (a local chigger, a type of mite), which can cause severe itching.



To protect yourself, coat your ankles with antiparasitic cream lotion or the local *carapa* oil.

Ashen moths (*papillons cendre*) are covered in hair that can cause a skin reaction known as Caripito itch which is very irritating but ultimately unserious (known as *papillonite* in French).

RUMOURS

Outside of the occasional road kill, you won't come across a lot of snakes in French Guiana. Accidents are extremely rare—there have been no deaths attributed to snakebites in the last 15 years—and only a few local species are venomous.

There aren't any venomous snakes in the region whose bite can kill in a matter of minutes. The most serious risk following snakebite is anaphylactic shock, which is not due to the venom's toxicity but rather to an extreme allergic reaction. Anaphylactic shock can be brought about just as easily by bee stings or eating a strawberry if you happen to be allergic.



In French Guiana, you can wade into the water while fishing for piranhas and then roast the ones you catch for dinner. There are no dangerous sharks around the coastlines.

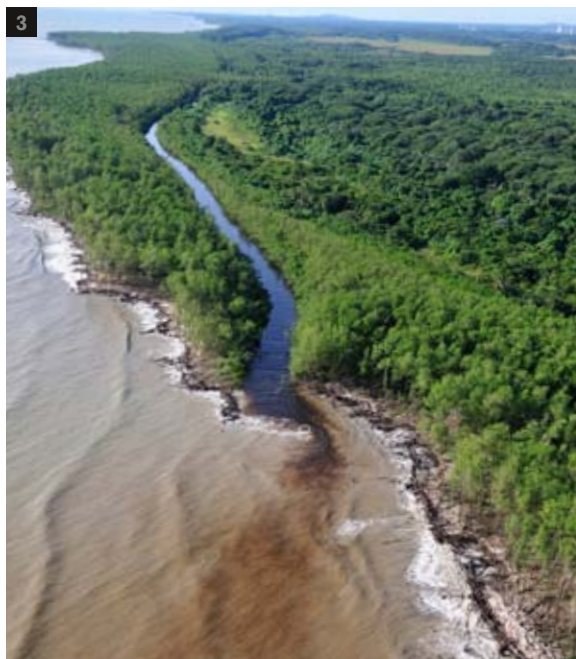
WATER

As in mainland France, public health officials test the quality of both food and water in French Guiana.

All along the coastal towns as well as in Maripasoula, St-Georges, and Regina, tap water is drinkable. In the hinterlands, whether in tiny villages or during your treks into the jungle, it's best to drink bottled water or treat drinking water with chlorine-based halazone tablets.

There is no reported occurrence of Schistosomiasis in the rivers of French Guiana, so swimming here is safe.

Haziness in the water is not a sign of contamination but rather due to silt. Nevertheless, try to investigate the bottom of sandy banks (or put on sandals) before putting your feet in the water, venomous stingrays can hide there and cause painful stings.



- 1 Leafcutter ant (Fourmi manioc) © GWENAËL QUENETTE 2 Members of the Paris Fire Brigade saving an anaconda © BSPP 3 Seashore © CSG/OV P. BAUDON
4 Pedestrian path at the Piste de l'Anse in Sinnamary © CSG/OV P. PIRON

Healthcare and Medical

Service Providers

► **The CMCK (The Medical-Surgical Centre of Kourou) Pierre Boursiquot**

Avenue des Iles – Phone: 0594 32 76 76

WITH 115 hospital beds, the CMCK is an essential element of the healthcare available in French Guiana.

Managed by the French Red Cross, the CMCK opened in 1965 in conjunction with the Guiana Space Centre. It was opened to address the medical needs of Kourou residents and construction workers responsible for building the CSG sites, a total of 800 people. The facility expanded starting in 1985 in order to meet required standards. With its high-performing materials and competent personnel, the CMCK is an exemplary hospital in French Guiana.

Today it consists of emergency medical services (SMUR), a surgical centre with operating theatre, internal medicine, cardiology, maternity and gynaecology, NICU and paediatrics, as well as medical imaging services equipped with a 3D scanner and a mammography scanner.

A free and anonymous AIDS testing centre rounds out the hospital facilities.



1 2 CMCK © CSG/OV

/// Pierre Boursiquot was a military doctor and the first doctor at the CMCK where he practiced for nearly 30 years.



⇒ HAD

As an alternative to hospitalization, home health care allows patients to undergo medical treatments in the comfort of their own homes. This treatment plan is also available in Kourou for complicated pregnancies.

⇒ Le Centre de Protection Maternelle et Infantile (PMI)

(Mother and Child Protection Centre)

1 rue Justin Catayée – Phone: 05 94 32 18 81

Located next to the Town Hall, this state-run centre provides services related to family planning, monitoring pregnancies, and follow-up care for children ages 0-6.

⇒ L'Envol, Centre Medico-Psychologique Infantile

Part of the Cayenne Hospital Complex.

Avenue des Roches – Phone: 05 94 32 60 04

⇒ Hemodialysis centre A.T.I.R.G.

Avenue Victor Hugo, tel. 0594 22 81 51

⇒ Freelance healthcare workers

Currently in Kourou, the practitioners and facilities include six pharmacies, fifteen doctors –two specialized in tropical diseases– speech therapists, physiotherapists, osteopathic physicians, psychologists, freelance nurses, and three dentist offices.

Specialized medical needs are usually met by the CMCK or the hospital complex in Cayenne.

⇒ The state-run healthcare system

Social security, the state-provided healthcare in France, is applied in the same manner as in mainland, in all ways related to medical insurance, work-related accidents and health insurance for seniors.

Family-based welfare benefits and the minimum wage are at the same level as in metropolitan France.





- 1 CAF
- 2 EDF
Lundi de 7h15 à 12h45 et de 14h30 à 17h15
Mardi au vendredi de 7h15 à 13h15
- 3 Eau (SGDE)
Lundi au vendredi de 7h15 à 14h
- 4 Gendarmerie
- 5 Hôpital (CMCK)
- 6 La Poste
- 7 Mairie de Kourou
- 8 Pôle Emploi
- 9 Police Municipale
- 10 Trésor Public
- 11 Sécurité Sociale (CGSS)
- 12 Crèche municipale
- 13 Groupe scolaire Emiles Nezes
- 14 Groupe scolaire Eustace Rimane
- 15 Groupe scolaire Olivier Compas
- 16 Groupe scolaire Olivez Palmot
- 17 Groupe scolaire Maximilien Saba
- 18 Groupe scolaire Michel Lohier
- 19 Groupe scolaire Raymond Cresson
- 20 Groupe scolaire Savane
- 21 Groupe scolaire Solange Patient
- 22 Collège I - Agarande
- 23 Collège II - Victor Schœlcher
- 24 Collège III - Omega Tobo
- 25 Collège IV - Joseph Ho Ten You
- 26 Lycée Elie Castor
- 27 Lycée Gaston Monnerville
- 28 IUT

Le Kourou

Embarcadère
Départ Iles du Salut

USEFUL ADDRESSES

First Aid	15		
Police or Gendarmerie	17		
Fire Brigade	18		
Gendarmerie Kourou	0594 32 00 03	11, avenue de France	97310 Kourou
Municipal Police	0594 22 33 00	Avenue des Roches (next to the Town Hall)	97310 Kourou
Hospital (CMCK)	0594 32 76 76	Avenue des Iles	97310 Kourou
Post Office	0594 22 07 80	4, avenue des Frères Kennedy	97310 Kourou
CAF (Family Benefits Office)	0810 25 97 30	2, place Alfred Nobel	97310 Kourou
Pôle Emploi (Employment Office)	3949	Avenue des Roches (across the Town Hall)	97310 Kourou
CGSS (Social Security)	0810 83 78 27	Avenue des Roches (across the Town Hall)	97310 Kourou
EDF (Electricity)	0594 22 30 00	29, lotissement Cabalou	97310 Kourou
SGDE (water)	0594 32 04 17	Avenue des Roches (across the Town Hall)	97310 Kourou
Public Funds Ministry (taxes)	0594 28 99 00	1555 route de Baduel	97300 Cayenne
Douanes (customs)	0594 29 80 11	Aéroport Félix Eboué	97351 Matoury
Inspection du Travail (Employment Inspection)	0594 32 74 95	Quartier Simarouba, place de la Condamine	97310 Kourou
Pôle Culturel (Cultural Centre)	0594 32 52 26	Rue Thomas Guidiglio	97310 Kourou
IUT, Kourou Campus	0594 32 80 00	Quartier Branly, av. Bois Chaudat	97310 Kourou
National Education Inspection	0594 27 19 79	Quartier Simarouba 12	97310 Kourou
Agronomic Campus, AgroPariTech	0594 32 93 00	Avenue de France	97310 Kourou
SIMKO, commercial office	0594 32 10 34	33, avenue Jean Jaurès	97310 Kourou
SIMKO, technical office	0594 22 00 00	Lotissement Cabalou	97310 Kourou
Mairie (Town Hall)	0594 22 31 31	30, avenue des Roches	97310 Kourou
Vie scolaire (School Life)	0594 22 81 05	(derrière la mairie)	97310 Kourou
Etat Civil (Registrar)	0594 22 31 95		
Elections	0594 22 31 66		
Service des Sports (Sports office)	0594 22 80 10		
Ecole de Musique (Music School)	0594 32 28 78	Place Alfred Nobel	97310 Kourou
Urania Cinema	0594 32 32 32	Quartier Simarouba	97310 Kourou
Tourist Office	0594 32 98 03	Place de l'Europe	97310 Kourou
CSG Tours	0594 32 61 23		
Camp Cariacou	0694 21 45 81		
Camp Canopée	0694 41 29 26		
Camp Papakai	0694 01 91 64		
Roches gravées Carapa (carved rocks)	0694 42 01 21		
Wapa Lodge	0694 28 18 28		



Preparing your arrival



1

To streamline your departure, some formalities are unavoidable:

- If you rent housing, you should send a notice to your landlord.
- Have your water, electricity, and gas services shut off the day after you plan to leave.
- Cancel your landline and mobile phone subscriptions. If you plan to continue using your European or international mobile phone while in French Guiana, make sure to turn on roaming. Three mobile phone providers operate in French Guiana: Orange Caraïbes, SFR, and Digicel.
- Cancel your television subscription service (cable, satellite, etc.).
- Request several estimates from different moving companies.
- Verify that all official IDs are up to date. While French Guiana is a region of France, your ID papers will be checked by French border police. A national ID is sufficient for Europeans. Passports are not required for Europeans but will of course be necessary if you plan to visit a neighbouring country (children must have their own ID or passport).
- Inform the following organizations of your change of address:
 - social security, additional health insurance plans, retirement office
 - housing welfare
 - employment office (if a member of your household will be looking for work)
 - tax office (taxes in France are declared by your address at the beginning of the year and will reflect your move after December 31st)
 - Insurance companies
 - Banks



2

Education

NOTIFY your children's schools of your imminent departure and ask a removal from registry form. With this document you will be able to enrol them in primary or middle schools at the Town Hall or in high school at the rectorat (local education authority). Enrollment is dependent on your home address.

- Primary school: request school records
- High school: request proof of registry
- University: request records transfer

For school registration, you must produce the following documents:

- Photocopy of the Family Records Book
- Photocopy of vaccination records including an up to date yellow fever vaccine.
- Scholastic certificate and removal of registry form from former school.
- A list of all former schools attended (in some cases)
- If arriving after the beginning of the school year, make sure to pick up all necessary school supplies.
- Proof of address form
- A self-addressed stamped envelope (to your address in Kourou)
- ID photos

Health requirements

An international vaccination card is required.

Yellow fever vaccination:

Travellers older than one year have to be vaccinated against yellow fever during their entire stay in French Guiana. The vaccine takes effect ten days post-injection and remains effective. Check for a registered vaccination centres, i.e. Paris airports medical facilities, and certain general practitioners' offices in French Guiana. The vaccine does not engender any side effects.

Pregnant women are exempt from the yellow fever vaccine requirement while they are pregnant. However, they must obtain a doctor's certificate verifying this exemption and get the vaccination when the pregnancy is over.

Don't forget to double check that all other vaccines are up to date.



3

Pets

IF you're bringing pets, reserve their spots on board as soon as you buy your plane tickets. Check and double check all official requirements. Take note of required vaccinations and delays.

1 At the Félix Eboué Airport © GUILLAUME NORMAND

2 The Toucan roundabout © DR

3 Dreyfus Tower (Semaphore) © DR



Arrival at the Guiana Space Centre, the Technical Centre © P. BAUDON



WORKING

at the Guiana Space Centre

*Jump in the
universe of
the European
Spatial Base*

Why French Guiana?



1 The CSG roundabout © CSG/OV

The Soviet Union's launch of Sputnik 1, the first artificial Earth satellite, on October 4, 1957, marked the beginning of the conquest of Space. The United States launched their first satellite, Explorer1, on January 31, 1958.

France, concerned about its independence, created the National Centre for Space Studies in 1961 to breathe new life into the country's own scientific research.

THE National Centre for Space Studies (CNES) used military installments established in Hammaguir in the Algerian desert at the beginning of the Space program. However, when Algeria became independent, a new site needed to be found.

Among the 14 worldwide locations considered, French Guiana easily finished at the top of the list due to its optimal launch conditions.

Because of the long coastline, launches can occur facing either north or east in maximum security. For eastward launches, the launchers benefit from the full speed of the Earth's rotation, which is highest at the Equator.

On account of French Guiana's proximity to the Equator, geostationary satellites need fewer maneuvers to correct their trajectory, allowing for reduced fuel consumption as well as an increase in satellite lifespan.

One Ariane 5 rocket carrying 10 tons into geostationary transfer orbit (GTO) from Kourou would only be able to take 8.3 tons from Cape Canaveral and just 5.7 tons from Baikonur.

The launch site in French Guiana is located on a broad plain, scarcely populated, and equatorial forests cover 90% of the country. There is no risk of cyclones or earthquakes.

Upon the creation of the European Space Agency (ESA) in 1975, the Guiana Space Centre became the Spaceport of Europe. The ESA has contributed to the development of the CSG by financing a majority of the construction and expansion work, which led to the Ariane program in 1979, Soyuz in 2011, and Vega in 2012.

The CNES, the French Space Agency, coordinates the CSG's activities, with the financial support of the ESA. Arianespace supervises the launch operations.

/// The CNES develops and drives Space-related guidelines in France and Europe.

The CNES controls how Space is both accessed and used to meet national and European needs, and its authority has increased since the passing of the LOS (Space Operation Law).

The Launchers

Ariane 5, The Heavyweight

THE lifting capacity of Ariane 5 ranges from 5 to 10 tons in geostationary transfer orbit (GTO) and can go up to 21 tons in low earth orbit.

The bottom part of the launcher comprises two Solid Boosters (EAPs) which alone provide more than 90% of the liftoff force. These boosters are positioned on either side of the Main Cryogenic Stage (EPC), which combines liquid hydrogen and liquid oxygen and is equipped with the Vulcain 2 motor.

The upper stage of the launcher contains the electronic “brain” of the launcher which holds all instructions necessary for the flight.

The payload -the satellites- are positioned on the carrying structures (called Speltra or Sylta) and are protected by the fairing while the launcher gets through the atmosphere.

The motor driving propulsion during the 3rd flight stage can be powered by:

- cryogenic propellants for Ariane 5 ECA
- storable, reusable propellants for Ariane 5 ES.



It is this second version of Ariane 5 which brought the ATV (Automated Transfer Vehicle) to the International Space Station (ISS) into a low orbit of 260 km from Earth.





VEGA

SOYUZ

ARIANE 5 ECA

Ariane 6

THE first test flight is scheduled for 2020: Ariane 6 has a 'PHH' configuration, indicating the sequence of stages: a first stage using strap-on boosters based on solid propulsion (P) and a second and third stage using cryogenic liquid oxygen and hydrogen propulsion (H).

Ariane 6 provides a modular architecture using either two boosters (Ariane 62) or four boosters (Ariane 64), depending on the required performance. Two or four P120 solid-propellant boosters will be common with Vega C, an evolution of the current Vega launcher.

The main stage containing liquid oxygen and hydrogen is based around the Vulcain 2 engine of Ariane 5.

The upper stage of Ariane 6 builds on developments for the Adapted Ariane 5 ME, and cryogenic propulsion using the Vinci engine. It will be restartable and have direct deorbiting features to mitigate space debris.

The total height of the vehicle is about 62m, the cryogenic main stage holds about 150t of propellants, the upper stage about 30 t.

The Ariane 6 launch complex, ELA-4, covers a surface area of 170 hectares of which 18 hectares will be buildings areas. The site is located 17 km away from the town of Kourou and 4 km west from the Ariane 5 launch pad (ELA-3).

The industrial contract covering the construction of the infrastructures for the ELA-4 facilities was signed in July 2016, and work started immediately to build:

- The Launcher Assembly Building (BAL), located 1 km away from the launch zone.
- The mobile gantry - a 90 metre-high mobile metallic structure - that rolls on rails equipped with platforms to access the appropriate launcher levels for integration on the launch pad. The gantry is moved away just before launch.
- The launch pad with its two symmetric exhaust ducts, four lightning protection masts, and a water tower for deluge systems.

The prime industrial contractors, CNES and ASL, are responsible for the launch base and launcher respectively.



1 Liftoff of Ariane 5 © CSG/OV

2 Ariane 5 liftoff as seen from the Kourou beach © CSG/OV P.BAUDON



1



2



Soyuz, The Middleweight

LOCATED 13 km northwest of the Ariane launch complex, in Sinnamary, the Soyuz launch complex (ELS) is almost a true copy of the launch pad used by Russia in Baikonur or Plesetsk. Soyuz components arrive at the CSG by ship, from Samsara via St Petersburg.

The components are assembled horizontally in the Launch Vehicle Integration Building (MIK).

The lower stages of the Soyuz-ST are transported from the MIK to the launch pad by rail, then erected to the vertical position and suspended by four support arms. Once vertical, a gantry moves in and encloses it. The encapsulated Fregat and payload is lifted vertically and mounted on top of Soyuz. The mobile gantry is retracted an hour before the launch.

The Soyuz STK has been adapted to conform to European regulations, specifically regarding safety.

All lower components work with kerosene and liquid oxygen. Fregat, the 4th stage, is powered by storable propellants and can be restarted several times.

The lifting capacity in geostationary orbit is 3 tons from Kourou to be compared to the 1.7 tons only, from Baikonur.

The first launch took place on October 21, 2011, and carried the first two operational satellites of the European navigation system Galileo, competitor of the American GPS.

3



1 Soyuz © CSG/OV R. LÉTAR 2 In the MIK © CSG/OV P. BAUDON 3 Soyuz liftoff © CSG/OV J.-M. GUILLON & S. MARTIN

Vega, the Lightweight

THIS ESA Program, developed under the impetus of Italy and financed at 65% by it, was named Vega after the second brightest star in the sky of the northern hemisphere.

Vega is also an Italian acronym that stands for *Vettore Europeo di Generazione Avanzata*, (New Generation European Launcher). The Prime Industrial Contractor ELV is owned at 70% by AVIO and 30% by the Italian Space Agency.

Vega can lift multiple loads ranging from 300 to 2,500 kg; nevertheless, its primary mission is to put scientific and Earth observation satellites into low polar orbit.

Vega is a 3m-diameter single-body vehicle, standing 30 m tall with a liftoff mass of 137 tons. It has three solid-propellant stages and a liquid-propellant upper module for attitude and orbit control, and satellite release.

It benefited greatly from the Ariane 5 technology, in particular, the P80; his qualification models were tested on the BEAP (Booster Test Facility) in Kourou; they are produced in Kourou.

The rocket is assembled on the ZLV in its mobile gantry. The gantry is withdrawn about 3 hours before lift-off.

Vega lifts off from the Vega Launch Site (ZLV), on the former ELA1 (Ariane Launch Area 1).

The launch operations are conducted from the CDL3 (Launch Centre n°3).



1 Fairing integration © CSG/OV P. BAUDON

2 Integration of Zefiro 9 © CSG/OV S. MARTIN

3 Vega Liftoff © CSG/OV





The Launch Facilities

The launch facilities and security zones of the Guiana Space Centre spread over 750 km².

AN impressive, full-size model of Ariane 5, situated just right next to the Space Museum, welcome the visitors.

Next to it, the Jupiter building sits astride the secured enclosure of the Technical Centre (CT) and the publicly-accessible area. It is in the Jupiter control centre where all important decisions are taken during the launch timeline. On the launch day, all the information concerning the launcher, the satellites, the weather forecast, etc., converges on the operator's desks in this room. If all parameters are favorable, known as "nominal" in Space jargon, the liftoff is authorized and announced in real time by the DDO (Director of Operations).

/// The Space Museum is where you can explore themed paths, interactive animations, full-size models, and films. In partnership with major European museums, playful and popularizing exhibits offer a straightforward approach to the scientific and technical world for young and old alike.



1 Jupiter Control Room © CSG/OV J.-M. GUILLON 2 The Space Museum © CSG/OV

Beyond these areas, we need to identify.

As a Restricted Establishment (ERR), the Guiana Space Centre needs particular regulation due to its activities and scientific and technical property. A complete set of rules, procedures, with several levels of warning, assure the protection of the base whether from break-ins, fire risks, or pollution.

Many actors guarantee the protection of the base:

- The Security-Protection service for access surveillance, alarms, and intervention systems,
- The Paris Fire Brigade (BSPP)
- The bomb-disposal unit for various tasks related to explosives.





The armed forces fulfill the outer security. These security measures are especially visible during the transfer of the launchers or satellites as well as during the lead-up to launches: police checkpoints, deployment of the 3rd Regiment of the French Foreign Legion spread throughout the launch facilities of the CSG, French naval boats along the coast. The Air Force monitors the airspace.

The access formalities take place at the reception building (Bureau d'Accueil); you will be delivered a photo ID badge and the associated magnetic card. They correspond to the buildings which you can access. A badge will also identify your vehicle.

Do not miss the recreational facilities next to the CT. The area includes a golf course, an aviation club, a football field, and a walking trail, among other attractions.

Three on-site restaurants are available to personnel: the Europe cafeteria at the CT, the Pirogue next to the CDL3, and the cafeteria at the Soyuz site.



/// The Paris Fire Brigade (BSPP) has been present at the CSG from the very beginning. They hold fire security training, as well as SST training (Workplace Safety Training) for personnel on the base. They act as support for hazardous operations especially when the propellant is fueled.

They regularly organize accident drills and can provide medical assistance.

- 1 The Pirogue cafeteria at the ELA © CSG/OV J.-M. GUILLON
- 2 The CSG Welcome Centre - Badge Office © CSG/OV G. BARBASTE
- 3 The Paris Fire Brigade's headquarters at the base © CSG/OV G. BARBASTE
- 4 At the Anse Golf course © PIERRICK GARROUX



The Technical Centre (CT)

The Technical Centre (CT) regroups most of the support facilities on the base. Each building takes its name from Greco-Roman mythology.

THE Uranus and Janus buildings house the services directly connected to the Administration of the CNES/CSG. Uranus also hosts the launch and campaign operations coordinating department (SDO) and the safeguard unit.

1 Aerial view of the CT © CSG/OV P. BAUDON

2 "La Montagne des Pères" with Kourou in the background © CSG/OV P. BAUDON



///The Flight Safeguard (Sauvegarde Vol) of the CNES/CSG is responsible for the persons, assets, and the environment during the entire launcher propulsion phase. During the preparation of a launch campaign, they analyze the planned trajectory. After liftoff, the operational team surveys the launcher's performance. If the flight could represent a risk to the population, it will be destroyed.

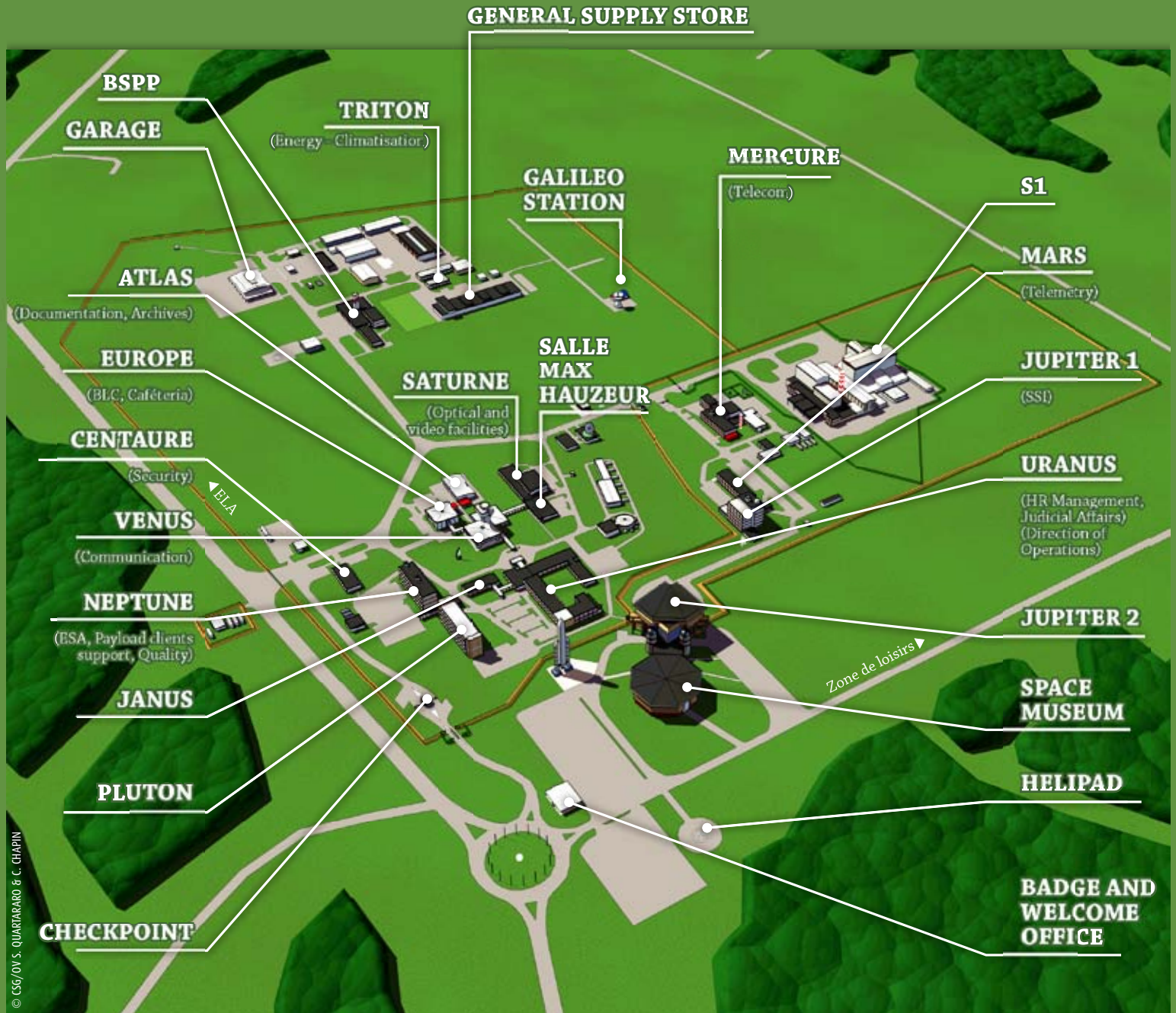
The security department is located in the Centaure building. Active or critical phases of the launch campaigns are photographed or filmed: the Saturne building hosts the photo-video department. The Telecommunications are in the Mercure building and Venus hosts the communications department.

The logistics area includes support services such as the garage, gas station, the general supply store, the fire brigade.

However, not all the means of the CSG are in Kourou: since its take-off until the end of the mission, the launcher, and its payloads are tracked and located by a system of optical, radars, and telemetry means. After a take-off towards the East, the trajectory of the launcher will be covered by the so-called downstream stations (*stations aval*), first by the Galliot station, at the Montagne des Pères, which one sees on the road coming from Cayenne, then by Natal in Brazil, Libreville in Gabon, and finally by Malindi in Kenya.



/// Complex systems necessitate rigorous procedures. During a campaign, the number of companies involved, the diversity of jobs, the multiplicity of sites, the interlinking of operational systems, and compliance with the rules for the safety of people and goods, all require sound planning and coordination.



© CSG/OV S. QUARTARARO & C. CHAPIN

CT

The Technical Centre

The CNES information tools at the service of the space base

THE DOCUMENTATION CENTRE

If you want to improve your knowledge, the Documentation and Archives team will be happy to help.

Situated in the Atlas building in the Technical Centre, next to the cafeteria, the “doc” offers several thousand interdisciplinary volumes, including many documents about Space and French Guiana. The “Doc” subscribed to over 150 specialized and general periodicals that you can borrow. And for those who don't have internet access at their workplace, an open access multimedia station will allow you to surf the web or consult specialized CDs and DVDs.



The documentation service is open to all staff from Monday to Thursday from 10 am to 4 pm as well as Friday morning. It is also open to students and teachers by appointment; they can find educational tools as well as documentary lists to which it's possible to subscribe.

THE CSG TELEVISION CHANNEL

To be watched either on the television sets at the Technical Center or at home, the CSG channel displays the latest news from the base, especially the jobs available, as well as what's going on in Kourou. The most important events, such as launches, are transmitted full and live.

LATITUDE 5

Latitude 5 is a quarterly magazine of the CNES/CSG distributed to all the staff of the base and partner companies.



The magazine proposes three themes: Working at the Base, Looking towards Space, and Living in French Guiana. Each edition focuses on an activity of the CSG.

MINIMAG & MMS

Delivered quarterly to every mailbox in French Guiana, the Minimag, and the MMS its twin for young people, feature columns about Space news, its applications, and the environment.



Production, Integration, and Launch

THE Guiana Space Centre is also a major industrial site. Several industrial establishments produce and integrate elements of launchers.

To get there, take the road known as the "route de l'espace." For safety reasons, the production and launching facilities are far from the technical centre. Each building is sufficiently distant from its neighbors so that even in the event of a serious accident, the damage caused would not impact another installation.



4

The French company Air Liquide Spatial Guyane (ALSG) operates two of the production factories: the LH2 plant which produces and stocks liquid hydrogen made from methanol and the Lox plant which produces liquid oxygen and liquid nitrogen by distilling and liquefying air. ALSG also distributes helium in gas and liquid forms. They supply both Ariane 5 and Soyuz.



5

- 1 At the CDI in the Atlas building © CSG/OV J.-M. GUILLON
- 2 The Latitude 5 magazine © D. BOUIX
- 3 The Minimag © DERF
- 4 Regulus skyview © CSG/OV
- 5 Lox Plant © CSG/OV J.-M. GUILLON





Satellites Integration

HALFWAY between the technical centre and the launch sites, stands the imposing S5 building. Dedicated to the preparation of payloads, it comprises three huge clean rooms (Class 100 000) and can receive up to four satellites at the same time.

Along with the S5 are the S1, located at the Technical Centre, the S2, the S3B (rehabilitated), and the S4 on the former Ariane 4 launch complex. The S2 and the S4 are no longer in use.

The satellites usually arrive on board large Antonov type carriers at the Felix Eboué Aéroport.



The Meteorological Station

IN permanent duty, reinforced before a launch, the weather station of the CSG gives forecasts for all activities at risk. These are mainly predictions of thunderstorms, rainfall, winds, as well as the atmospheric measurements required for launch (especially winds at high altitudes). It operates several specialized types of equipment, such as radars, instrumented mats, weather balloons.

Daily forecasts meet all the needs for which the safety of people passes through stable weather conditions.

Through its statistics, the weather service offers a view on the evolution of the climate in Guyana, since its creation in 1969. It diffuses a monthly climatological summary.

1 S5 building © CSG/OV

2 A satellite arriving on an Antonov carrier at the Cayenne Félix Eboué Airport © CSG/OV S. MARTIN

3 Satellite preparation in S5 © CSG/OV P. PIRON

4 CSG meteorological buildings © CNES S. DELMAS



The Booster Zone, (*Zone Propulseurs*)

➤ **Regulus, French Guiana Propellant Plant (UPG)**

This unit, which has been in operation since 1992, carries out the loading, control, and storage of the central and rear segments of the solid rocket boosters. Each one is approximately 11 meters long and 3 meters in diameter and contains about 105 tons of solid propellant.

Regulus also works for the ELV subsidiary (Avio 70%, ASI 30%), involved in the coordination and integration activities of the Vega light launcher especially his lower stage, the P80.

The plant is preparing to manufacture the Ariane 6 boosters, the P120.

Regulus comprises 46 buildings on 300 hectares and employs nearly 100 people.

➤ **The Solid Rocket Booster Integration Building (BIP)**

In this building, the French-Italian company Europropulsion (ASL-Avio) prepare the Solid Rocket Booster (EAP), and Vega's P80.

The integration of EAPs consists of the assembly of its three segments, the flexible thrust nozzle, the forward skirts, and aft skirts. After undergoing functional tests, the EAP is transferred on his flight pallet to the Launch Integration Building (BIL) by rail on an 180 t mobile platform.

➤ **Solid Rocket Booster Test Facility (BEAP)**

This test bench has been designed for the development and qualification of solid rocket boosters. It consists of a tower 50m high on a pyramidal concrete structure that overhangs a spray deflector with a depth of 60m dug in the granite. It allows testing the various propellant specimen (for Ariane as for Vega) in flight position. It can withstand a thrust of 1350 tons.

The EAP Storage Building (BSE), the Booster Logistical Building, and the Stage Preparation Building (BPE), which is also the administrative headquarters of Europropulsion complete this area.

1 Transport of a solid rocket booster segment © CSG/OV P. BAUDON

2 The huge mixer in the UPG © CSG/OV P. PAUDON

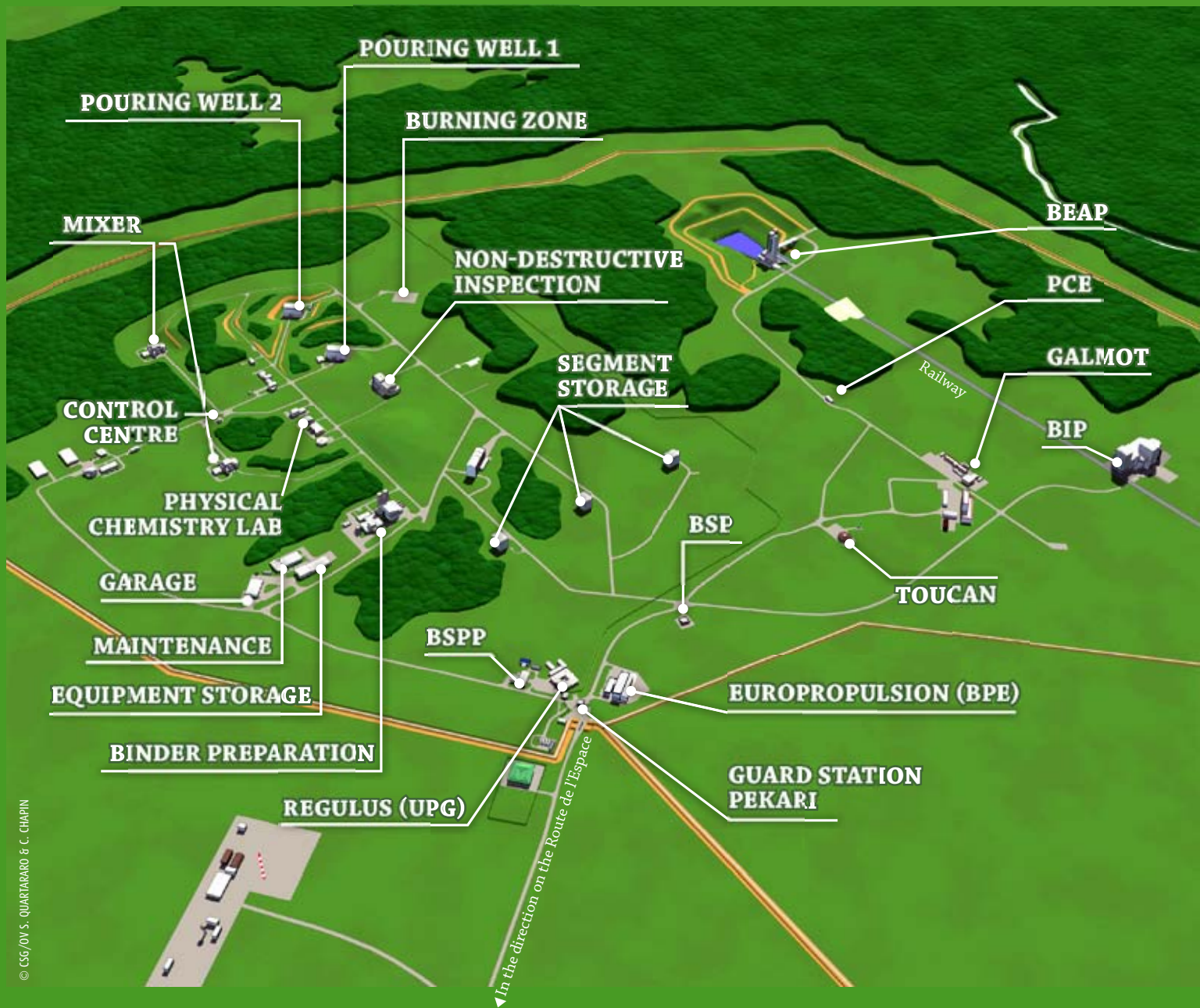
3 The EAP leaving the BIP © CSG/OV

4 EAP testing at the BEAP © CSG/OV





In the foreground the BEAP, behind the BIP, then the BSE, the BIL and the ZL3 on the far right



UPG

Booster Zone

Launch Complex 3 (ELA 3)

THE site of ELA3 is dedicated to Ariane 5. It follows ELA1 from which the 28 Ariane 1, 2 and 3 were launched between 1979 and 1986; its installations resumed those made for the Europa launcher. They have been redesigned to accommodate VEGA.



ELA2 dismantled in 2011 saw the launch of the 116 Ariane 4.

The launcher components manufactured in Europe are mostly carried on two specially designed ro-ro ships, MN Colibri and MN Toucan. The boats dock at the port of Pariacabo in Kourou.

It is in Bremen that the Storable Propellant Stage if used, is embarked; in Rotterdam, the payload fairing arrived from Switzerland by barge on the Rhine, in Le Havre, the cryogenic main stage on the Seine. In Livorno, near Rome, the segments of the solid boosters are embarked.



Launcher Integration Building (BIL)

It is in this building that the ASL teams begin the launch campaign with the erection of the cryogenic upper stage (EPC) on one of the two mobile launch platform. The two EAPs are then placed on both sides of the EPC and will support the EPC. The upper stage is positioned above, as well as the instrument unit.

Once these operations are completed in the BIL, the assembled launcher is transferred, always on its launch platform at the Final Assembly Building (BAF) where the teams of Arianespace take over for the second part of the campaign.



Final Assembly Building (BAF)

THE satellites arrive in Payload Containers (CCU) in the satellite encapsulation hall, mounted on the Sylda (or Speltra), and then covered by the two half-fairings. The whole is then hoisted upon the lower part of the launcher that has already arrived from the BIL. The umbilical tower on the launch table is then topped off by a 20m extension which contains the connections for the fairing's air conditioning system. The attitude control system and possibly the EPS are charged with fuel.

It is a specific truck that tows the complete launcher, still on its launch platform, towards the launch zone (ZL3).

1 The MN Colibri and MN Toucan routes © CSG/OV

2 The BIL, the BAF, and Ariane 5 being transported to ZL3 © CSG/OV

3 The assembled launcher leaving the BAF © CSG/OV

4 EPC integration in the BIL © CSG/OV

Ariane 5 Launch Zone (ZL3)

THE final countdown and the launch of Ariane 5, controlled remotely from the Launch Centre, take place 6h before lift-off in the ZL3.

Plainly designed, this area has a minimum of fixed elements to be less vulnerable in the event of an accident.

On its arrival, the launch platform is positioned against the concrete massif overhung by the Cazes tower. They contain measurement equipment, the electrical and fluid interfaces needed to fill the EPC.



The rocket on the launch table overhangs three jet deflectors known as flame trenches (*carneaux*) which allow the gasses to be channeled away when the motors are ignited.

A nearby 90-m high water tower holds 1,500 m³ of water. 30 m³ per second are discharged during liftoff to put out flames and stop the vibrations. Four lighting arrester towers complete the zone.

/// Two people work in parallel throughout the launch campaigns: the DDO (Director of Operations) for CNES at the Technical Centre and the COEL (Chief of Operations of the Launch Facility) for Arianespace. They can be compared to the control tower of an airport for the DDO, it ensures that all the means implemented are operational; to the pilot-in-command of an airplane for the COEL. At the time of the launch, the DDO officiates room Jupiter and the COEL in the CDL.

Launch Centre 3 (CDL)

ALL ELA 3 operations take place in the CDL 3 (and for the Vega Launch Pad since 2012). This u-shaped building houses offices as well as control rooms in an armored area.



1 & **2** Ariane 5 rocket arriving in ZL3 © CSG/OV P. PIRON, P. BAUDON **3** The armored area of the CDL3 and the BIL and BAF in the background © CSG/OV



ELA / ELV

Ariane and Vega Launch Facilities

Working Together

The Main Space Operators in French Guiana



European Space Agency is an international organisation with 22 Member States.

ESA is the owner of the launcher production facilities and finances a significant part of the fixed costs of the launch base.

ESA also finances new facilities, such as launch complexes and industrial production facilities, for new launchers such as Vega or for the exploitation of Soyuz.



The CNES represents the French state.
CNES coordinates the launch preparation operations.
It ensures the safety of people and property.



The Arianespace branch in Kourou operates the launch operations of Ariane, Soyuz, and Vega.



Airbus Safran Launchers is a joint venture of the European aerospace company Airbus Group and the French group Safran, with its three core businesses: aerospace (propulsion systems and equipment), defence and security with the objective of development and subsequent production of Ariane 6.

ASL is the prime contractor for the Ariane 5 system.



Industrial Organization

The Base Employer-Union (UEBS)










































The organization of the CSG is based on industrial contracts negotiated within the framework of international calls for tenders organized by CNES and Arianespace. They are renewed every five years.

The Guiana Space Centre is made up of a mosaic of companies, activities, professions, nationalities and cultures with more than 40 industrial partners and more than 1,700 employees.

However, they form a human and professional community which shares a significant number of concerns. This is why the employers of the CSG have grouped themselves in the Union of Employers of the Space Base (UEBS).

The CNES and Arianespace hold the positions of President and Vice President of the organization, respectively.

Member Companies of the UEBS and Their Domains

- | | | |
|---|---|--|
|  MT Aerospace
Mechanics – Electro-mechanics – Metrology |  CNES
Operations Control and Coordination – Safeguard and Security |  RUAG
Fairings |
|  AIR LIQUIDE SPATIAL GUYANE
Gas production – Maintenance and use of cryogenic fluid grid |  ELV
Vega Launch Operator |  SARVIS
Digital technology |
|  ALCADIA
Risk management |  ENDEL ENGIE
Facilities Management – Transportation – Transit – Electromechanics – Rolling Stock |  SATTAS
Topography |
|  AMARANTE Espace
Security |  ERIMA
Safety systems |  SAVANE
IT |
|  APAVE
Quality – Safeguard – Regulatory evaluations |  EUROPROPULSION
Solid propellant motor integration |  SERCO
Business IT and Communication |
|  APCO Technologies
Electromechanics – Electrotechnics – Research Department |  FREE LANCE
Concierge services |  SERIS SPACE Guyane
Security |
|  ARIANESPACE
Launch operator |  GTD
Business IT |  SME
Quality Control |
|  ASL
Prime contractor Ariane 5 and 6 – Chemistry lab – Gas detection |  GUYANET
Industrial cleaning |  SODEXO
Catering – Green Spaces – Industrial cleaning – Pest control – Museum and site tours – Documentation and Archives – BLC – Logistics |
|  AXIMA
Operation and maintenance of climate control systems |  INSA
Quality Control |  TELEMATIC SOLUTIONS
Metrology |
|  BOLLORE Logistics
Logistics |  ISQ
Quality Control |  TELESPAZIO
Telecommunications and synchronization – Telemetry – Planning – Document management |
|  BT services
Business IT |  PANDA Services
IT |  THALES Services
IT Security |
|  CEGELEC Space
Fluid Systems – Mechanics – Electrotechnics – Hydraulics – Pneumatics – Low Currents and Energy |  PEYRANI
Transportation – Handling – Precision Mechanics |  TüV
Quality Control |
|  CLEMESSY
Command Control Systems – Industrial Electricity – Robotics |  REGULUS
Solid Propellant Production |  VIDELIO IEC
Optics – Audio – Video |
| |  RMT
Security and Protection Systems – Automatic fire detection and extinction – Energy |  VITROCISSET
Remote controls – Meteorology – Localization – Command control systems |
| |  ROVSING
IT Quality | |

The “Convention de Site”

THE excellence of the CSG is also the result of the harmonization of its social policy. Since 1990 the inter-company agreement called the *Convention de Site* ensures common standards. It seemed necessary to coordinate employment and training practices to achieve better synergies. Its main focus is the harmonization of working conditions and remuneration, professional training and inter-company mobility.

BLC, Bureau Local des

Compétences (Local Skills Office)

As a common structure for all employers within the UEBS, the BLC supports companies and their employees equally.

The BLC regularly organizes “base discovery days” (JNA for “*Journée des Nouveaux Arrivants*”) to facilitate the integration of newcomers. Ask your manager if you’re interested.

The BLC is also a key site where all employees can find out information about on-site job openings; the office collects and diffuses available information about job offers and associated applications.



The whole team relies on efficient networks and its excellent knowledge of the regional and local economy.

The BLC team offers also other services such as implementing inter-company training courses in the fields of technology, IT, management, which provide opportunities to correlate working methods and develop a common culture.



The BLC can be reached by phone at (594) 0594 33 50 53 or by e-mail at bhc.csg@cnes.fr

The BLC team performs some services including intercompany training courses on technical, IT, or management sectors which also serve an opportunity to correlate working methods and develop a common culture.

Joint training sessions for a better understanding

THE Safeguard Training (*Formation Sauvegarde*) is the first training session for new arrivals required to obtain a working badge. This training session is adapted to each workplace and allows for the identification of potential dangers as well as an adequate response. It is repeated at regular intervals.

The Information Systems Security Team (SSI) organizes workshops on legal matters, computer security, and Internet access. Participation in these workshops is useful both at the office and at home.

At the Technical Centre, the Quality Service regularly offers training sessions to UEBS employees. Certain sessions only last a half-day but can help you save a lot of time in the long run. Don’t hesitate to sign up for a session on risk analysis, incident handling, operational procedure writing, or document management. The ADEQUA (Quality Decision Help) seminar provides tools to resolve a variety of problems more effectively and to facilitate decision making.



1 The Convention de Site 2 The BLC Team © CSG/OV P. BAUDON 3 A launch viewed from Jupiter room © CSG/OV P. BAUDON



Visit/Tour the Guiana Space

Centre!

Tours are free and open to the public ages 8 and up. You must present ID (driver's licenses are not accepted).

Tour schedule:

Monday to Thursday at 8:00 a.m. and 13:00 p.m.
and Fridays at 8:00 a.m.

Reservations are required

Contact info:

Phone: 05 94 32 61 23

Fax: 05 94 32 17 45

Email: visites.csg@cnes.fr

To see a launch in person

Individuals 14 years and older are allowed in the Jupiter room and 16 and older are allowed at dedicated viewing platforms.

For more information:

Phone: 05 94 33 42 00

Registration on the CSG Website:

<http://www.cnes-csg.fr>

<https://cnes-csg.reservationlancement.fr/fr/Inscription/Lancements>

CENTRE SPATIAL GUYANAIS

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