



Curacao Space Legislation

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Where is Curacao ?





Curacao



Facts

Location

Located 50 km north of Venezuela (12 degrees N equator)

Political

Since 10 October 2010 autonomous country in the Kingdom of the Netherlands.

Size

It has a width of 4 to 12 km. Length is around 50 km.

Capital: Willemstad

UNESCO includes the harbor and the historic city in the list of World Heritage Sites.

Population

150,000 individuals, 55 different cultures. Dutch official language, many speak English, Spanish and Papiamentu

Climate

Tropical.



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Curacao



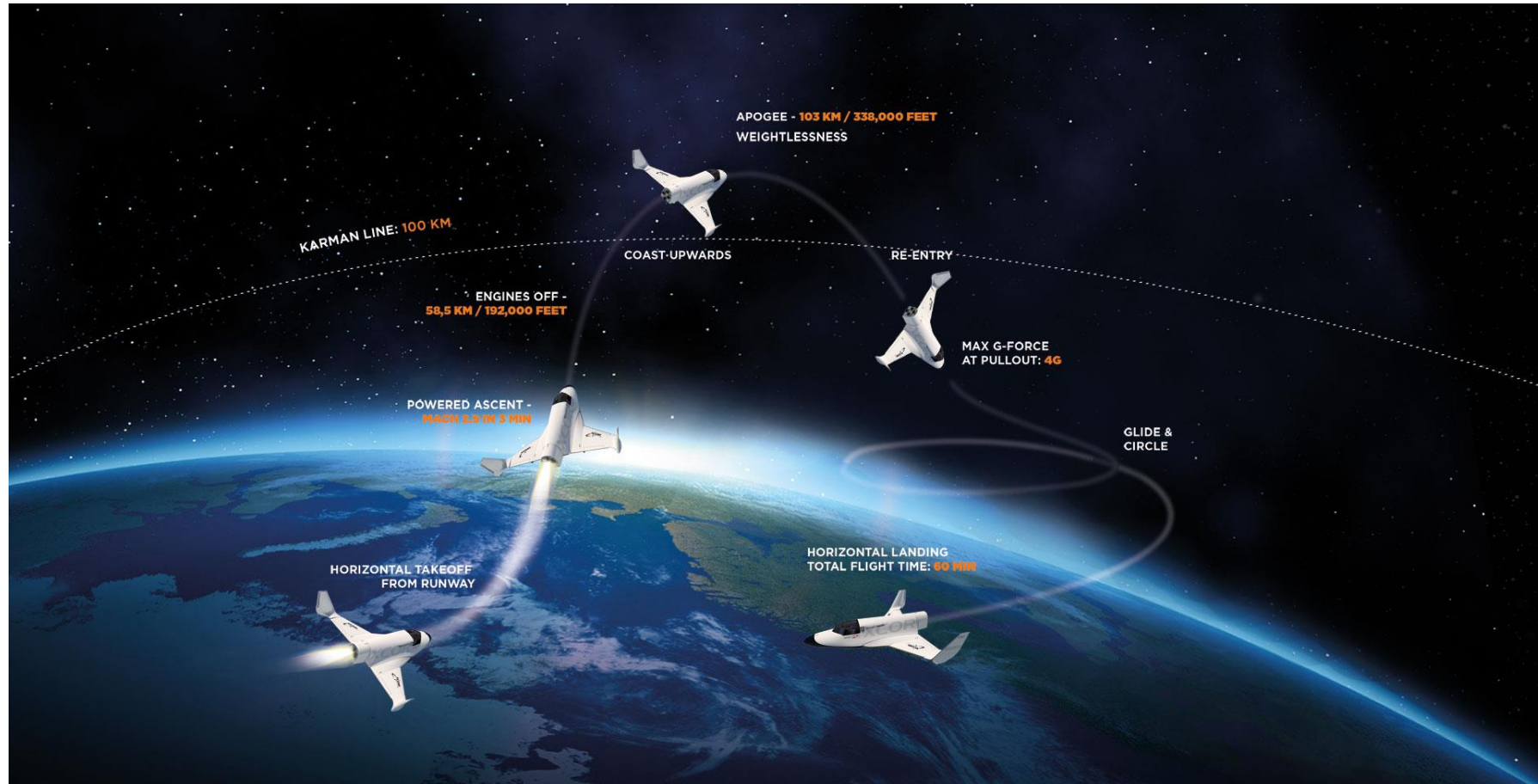


Introduction

- XCOR/SXC plans (2017) suborbital flights from Curacao with a rocket power-driven “Lynx”
 - Speed: 3.500 km/hr
 - Climbing angle: 80 degrees up to 103 km into space
- Take off from/return to Curacao Air- and Spaceport
- Legally dealing with international ***air law*** and ***space law***



XCOR-Lynx flights to space



Introduction

- Since 2012 specific legislation is created in Curacao
- For spacecraft operations in an air- and space environment

- Creation by **C**uracao **A**ero-**S**pace Law **T**eam (CAST-team)

- | | |
|-------------------------------------|--------------------------------|
| ▪ Aerospace/Space lawyer | Mr. Storm van 's Gravesande |
| ▪ Space lawyer(University Nebraska) | Prof. Von der Dunk |
| ▪ Aerospace/Space engineer | Mr. Van Hövell tot Westervliet |
| ▪ Legislative lawyer (Curacao) | Mr. Timmers |



- ✓ Complexities: - Curacao independent, but part of the Kingdom of the Netherlands
- Operation by Foreign (US) Operator (oversight)



Assumptions

- Assumptions for a national Curacao Space Act and supporting Decrees:
 - “Look 5 years ahead”
 - “Use for Space Act and Decrees what is practical in aviation and has proved itself”
 - “Keep it simple”
- Not only for XCOR’s Lynx, but for all space flights
- Close contact maintained with FAA/AST in Washington

The Result

- In 2013 a draft “Space Act Curacao” emerged; the basic law
 - This draft Act was further processed by several Curacao Ministries
 - The “Advisory Board” provided detailed comments on the draft Act
- Draft Act expected soon to be presented to Parliament for final approval



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Curacao Space Act (2013)

General Provisions

Permits for aerospace companies

Execution of space activities

Register of space objects and space activities

Liability, insurance

Incidents and accidents

Special provisions





Curacao Space Act (2013)

Major issues:

- Definition of the "craft"
- Air- / "Space" – worthiness (certification)
- Registration
- Air Travel ? Space Travel ?
- Operations, safety and security
- Safety Management
- "Air" Traffic Control/Mgmt, use of "airspace"
- Status of the Crew and the "Passenger"
- Liabilities
- Insurance
- Dangerous Goods





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From high level Space Act to detailed Decrees

- Besides the "Space Act Curacao": (technical) Decrees
- Decrees issued by Minister or DG CASAC (flexibility !)
- Decrees are ready in the course of 2016

- Curacao Civil Aviation Authority (CCAA) becomes:
Civil Aviation and Space Authority Curacao (CASAC)



The (Technical) Decrees in Curacao



These Decrees contain mainly technical / specific issues:

- “Air - space” worthiness / Supervision
- Registration vehicle and registration for UN (Vienna)
- Licensing and use of Air – Space port Curacao
- Licensing of the operator, crew, position “captain-astronaut”
- Instruments etc. on board / Performing the operation of flights
- Liability / Insurance, Position “space flight participants”
- Dangerous goods
- Landing fees etc.

Curacao Space Act and (Technical) Decrees

- Together they form Curacao's new regulatory space framework
- Not only for XCOR's Lynx, but adequate for all space flights
- Not only for suborbital flights, but for all space flights
- Regulatory space framework spring board for new activities:
University, R&D, involve youth, tourism, etc.



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THANK YOU !