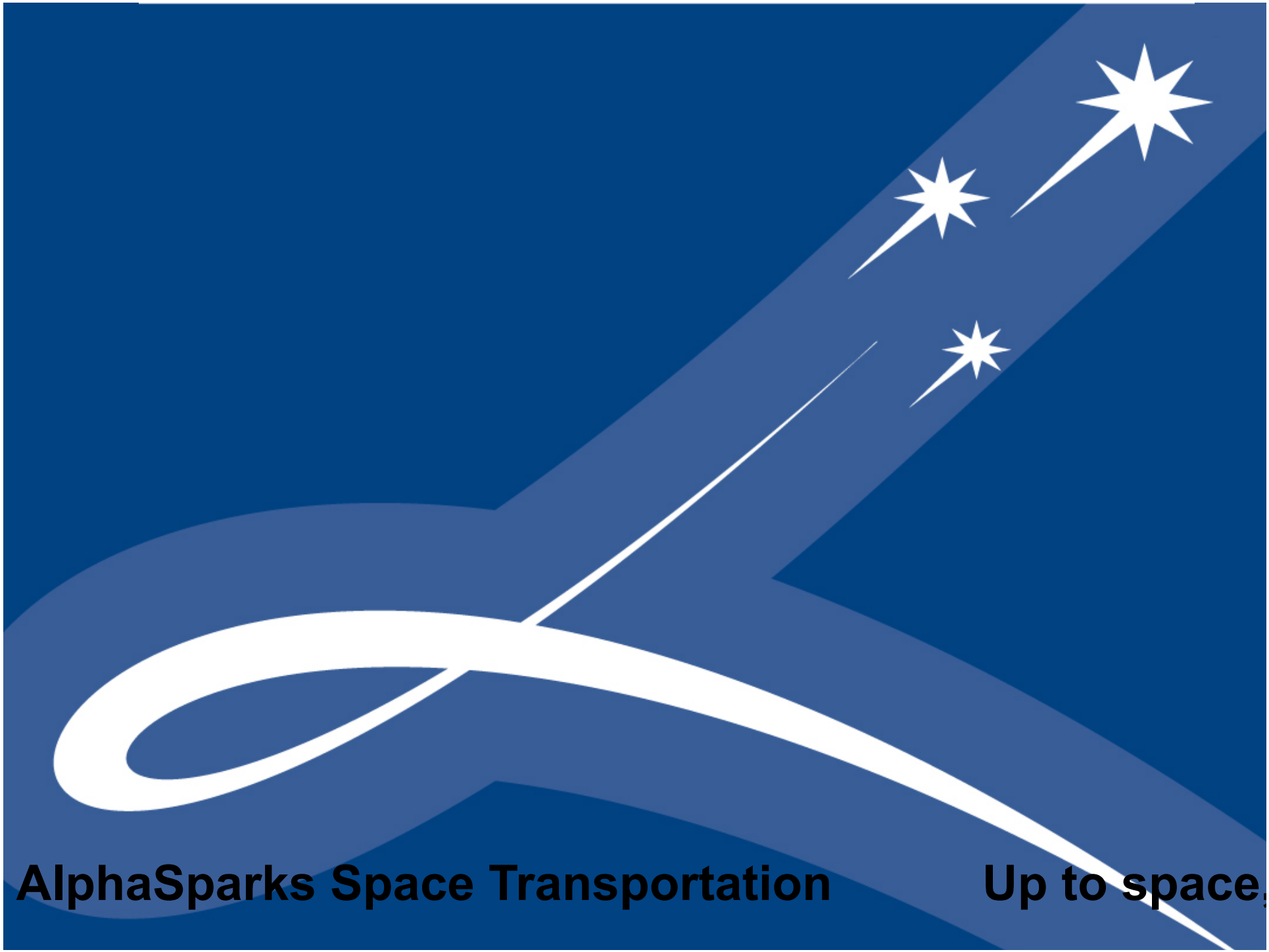
AlphaSparks Space Transportation
Up to space,

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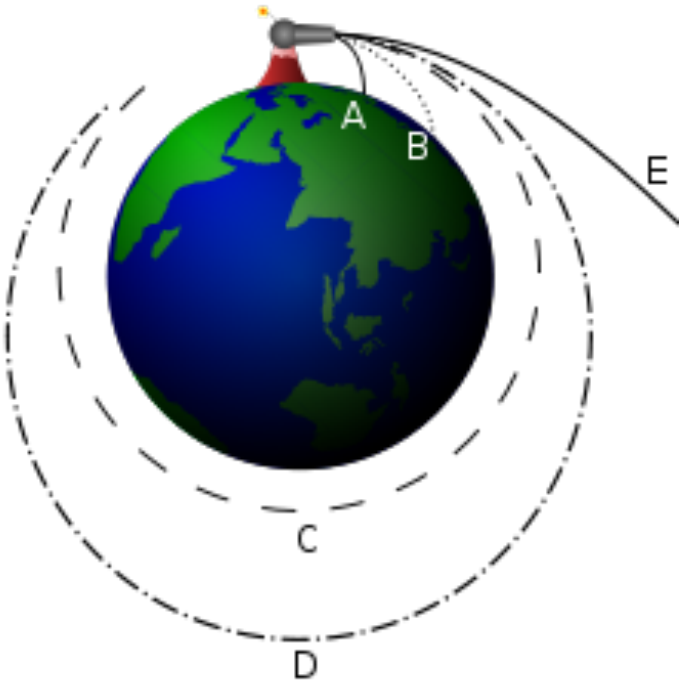
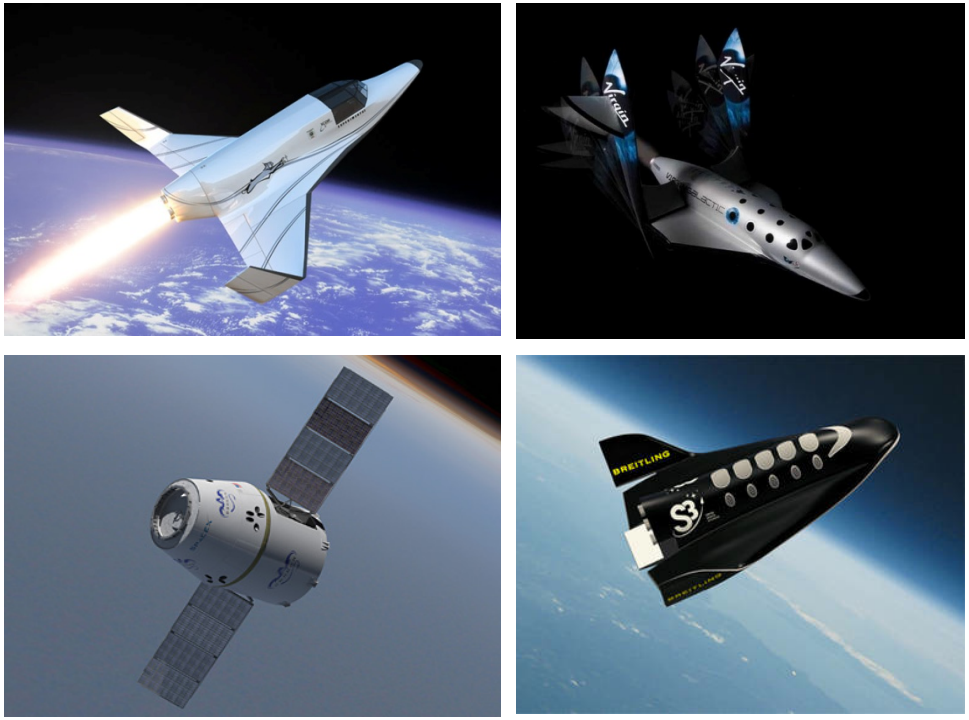
BACKGROUND

- **SUB-ORBITAL FLIGHT**
- **ORBITAL FLIGHT**



BACKGROUND

- **NEW COMMERCIAL INITIATIVES**



ALPHASPARKS' INTENTION

- **Make use of the on-going developments for commercial spaceflight (space tourism) for the realization of scientific experiments.**

- **To facilitate scientists with everything they need to conduct their experiments in a commercial scheme**

ALPHASPARKS' INTENTION

- **Reduce experiment cycle time**
- **Reduce costs of conducting experiments**
- **Increase repetition rate**

- **Broker – Developer – Integrator role**

EXPERIMENT CYCLE REDUCTION

- **Large amount of low cost flights (e.g. suborbital SXC foresees to fly 4 times a day)**
- **SpaceX's responsive DragonLAB (orbital)**
- **Not subject to time consuming rules and regulations set by e.g. financing parties**
- **"You experiment what you pay for", "on a first come first serve basis"**

EXPERIMENT CYCLE REDUCTION

- **Keep the paperwork to the bare minimum**
  → Focus on the key areas

- **Avoid a multitude of organizational layers**

- **Payload development is streamlined into the process**

- **a "One experienced mind thinks of all" approach**

- **Commercial initiative → profit is required to be made.**
  →proven to be the strongest motivator and accelerator entrepreneurial activities in the past

COST REDUCTION

- **The previous addressed has immediate effect on costs**
  (man-hours and associated hourly rate).

- **Initial investment being written off over many payloads, especially if also multiple carriers are targeted.**

- **Simultaneous testing and eliminating unnecessary tests**

- **No cost saving compromises in the area of safety**

INCREASED REPETITION

- **Multiple carriers available**
- **Short time foreseen to get an experiment on a carrier**
- **Flight rate of these carriers**

PAYLOAD BROKERAGE, DEVELOPMENT AND INTEGRATION

- **Collecting a variety of different experiment hardware packages (brokerage) and the interfacing between these payloads and the carrier (integration) is a feature which most of the launch providers are not willing to perform and most of them are therefore looking for providers of these services**

- **AlphaSparks is a company able to perform these services**

PAYLOAD BROKERAGE, DEVELOPMENT AND INTEGRATION

- **Most launch providers will operate with multiple payload brokers and no exclusive deals are to be expected**

  → payload brokers have to actively search for experimenters and thus is marketing a very important part of the payload broker function.

EXPECTATIONS

- **AlphaSparks expects to realize complete experiment opportunities in short time and expects the same expectation from its customers**
- **Develop hardware in direct cooperation with scientists**
- **No georeturn constraints**
- **Multiple experiment repetitions**
- **Alphasparks intends to serve the customer properly and swiftly before moving on to the next.**

EXPERIENCE WITHIN ALPHASPARKS B.V.

- **Experience has been gained with the development of payloads of various scientific nature and complexity, for unmanned and manned carriers as complex as the ISS.**

- **The experience can best be described as connecting the start point, via all intermediate steps, with the endpoint of the path followed by scientists, engineers and integrators, in order to realize experiments on board of a variety of carriers.**

- **Important experience exists in managing large set of complex payloads for scientific missions.**

EXPERIENCE WITHIN ALPHASPARKS B.V.

- **The working method can be best compared with the working method that SpaceX has developed for its launch vehicle family, although those activities occur of course at a completely different scale.**

- **A wide range of experience in the successful start-up and growth of new business is available. The financial basis of the team is solid - more than sufficient risk-bearing founding capital is at the team's disposal.**

The team intends, together with its partners, to be a major player in the commercial spaceflight field.

AlphaSparks

Up to Space, down to Earth

AlphaSparks

Up to Space, down to Earth