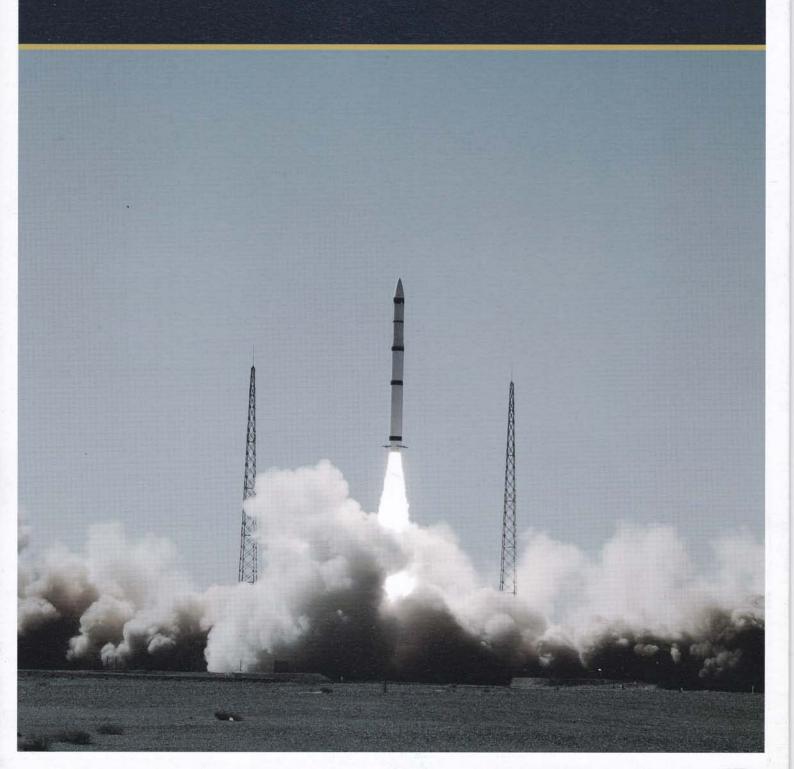
# **AEROSPACE APPLICATION**





# SPACE TECHNOLOGY DEVELOPER

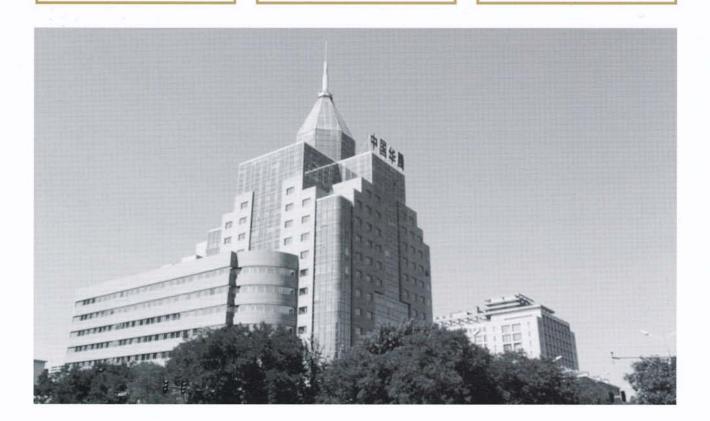
#### **Enterprise Introduction**

China Volant Industry Co., Ltd (China VOLINCO) is the main international arm of CASIC which is the main leading Aerospace and Defense enterprise in China. CASIC owns seven academies, two scientific research and development bases, six public listed companies, and over 620 other companies and institutes scattering nationwide.

By years of development, China VOLINCO becomes one of the influential space solution providers in China. With low cost, fast action, China VOLINCO can provide launching services, satellite manufacturing as well as the ground applications for our customers.

Launch service

Satellite design and manufacture Satellite land application and related facilities construction



# **Advantaged Global Satellite System**

### ——Fortune Star

Fortune Star system is a mobile communication service system with low-orbit satellites as its information transit stations. It can provide roaming and flexible communication services featuring low costs, large capacity, wide span, high speed and low delay for terminal users in areas which the ground mobile communication system cannot cover or where the communication quality is poor, such as aviation, ocean, disaster areas and remote districts.

#### Features

- Low cost
- Wideband service
- Open/Safe/Reliable
- Low delay
- Wide coverage
- Easy deployment

#### **Typical Cases**

- Airplane/ High-speed railway
- Energy/Prospecting
- Water conservancy
- Meteorology
- Maritime affairs
- Agriculture/Fishery
- Logistics
- Anti-terrorism hot spots/Disaster areas







#### Cooperation

The Fortune star system will be deployed & operated on a commercial mode. As the project initiator, our company is willing to cooperate with governments or enterprises all over the world to establish a project operation jointly, and co-construct a new-generation of space-based information highway.

## **LAUNCH SERVICE**

#### **Launch Services Program**

The launch services will include a launch vehicle dedicated for the customer, launch operations, meetings & reviews during the whole program cycle and other related services.

The launch vehicle will be completed with Satellite Fairing (STF), Satellite Adapter (STA), separation system and umbilical interface plus the provision of a customer designed logo on the fairing.

#### **Features**



Low Cost

High Reliability

High Precision



#### **KZ Series Solid Launch Vehicle**

KZ series solid launch vehicle is a kind of high reliability, high orbit injection precision and low cost solid launch vehicle, which is in accordance with international standard interfaces. It offers the service of sending small satellite into Low Earth Orbit (LEO) for domestic and international customers.



# **LAUNCH VEHICLE**

KZ-1 Character Max. Diameter: 1.4m Lift-off mass: 30t Fairing:  $\Phi$ 1.2m/ $\Phi$ 1.4m Carry capacity: 200kg/700km SSO **Typical Orbit Accuracy** Semi-major axis: ≤ ±5km 中 Inclination: ≤ ±0.1° Eccentricity:  $\leq \pm 0.002$ 国 航 3-Axis Pointing Accuracy Angle: ≤ ±0.5° Rate: ≤0.3°/s



**KZ-11** 

Character

Max. Diameter: 2.2m

Lift-off mass: 78t

Fairing: Φ2.2m/Φ2.6m

Carry capacity:

1000kg/700km SSO

Typical Orbit Accuracy

Semi-major axis:  $\leq \pm 5$ km

Inclination: ≤ ±0.1°

Eccentricity: ≤ ±0.002

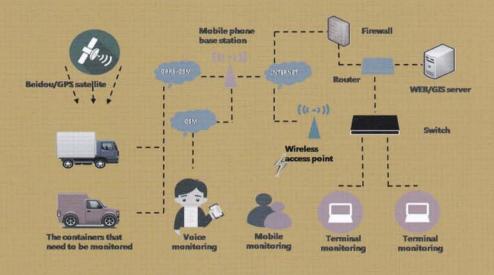
**3-Axis Pointing Accuracy** 

Angle: ≤ ±3°

Rate: ≤1°/s

#### **Modern Logistics Monitoring and Management System**

Supported by GNSS(GPS/Beidou) and mobile communication network, the system satisfies the safety and monitoring requirement of the logistics, achieves real time management and dynamic monitoring of the vehicle networking, vessel networking and etc. And it successfully improved management efficiency and lowered the operation substantially.



#### **Satellite Communication Products**



Vehicle Antenna Series



On-the-move Antenna Series



Flyaway Antenna Series



Satellite Communication Station Systems



Air Based Communication Support Systems



Land Based Communication Support Systems



Disaster Emergency Communication Support Systems

#### **Remote Sensing Satellite Design and Manufacture**

We provide satellite design and manufacture, on-orbit commission and application service for remote sensing in LEO(Low Earth Orbit ). Various payloads, operation frequencies and flight maneuver systems can be chosen to fulfill the clients' requirement.



#### **Date Processing Tools and Service System**



Super Computing Platform



Image Loading



AutomaticSplicing



Crop and Output Image

E-Stitching



Global Map Server



Tilt photography data



Tilt image



Real 3D

Photo Station

#### **Ground Station Construction**

We can construct the satellite ground station with tracking, receiving, recording and processing of remote sensing satellite data.





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