cailabs

SHAPING THE LIGHT

Optical Communications, enablers of Resilient & Secure space networks

110
Total Employees
France & US

26
Patent families

$50M
Raised to date

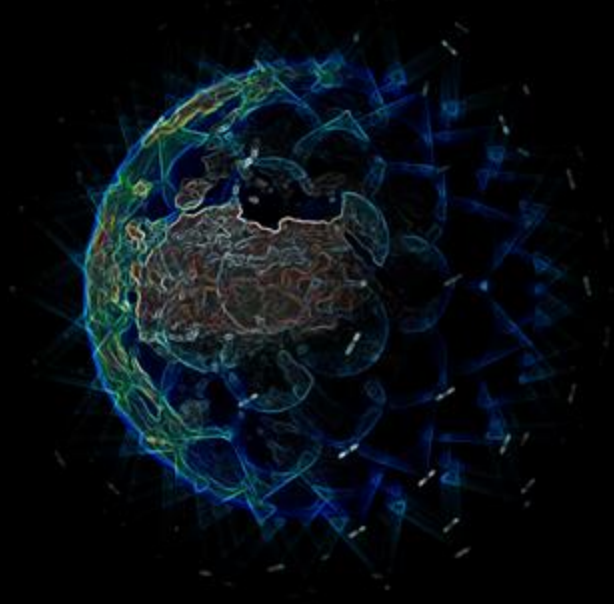
7/2
Optical Ground Stations under contract / shipped

Jean-François Morizur, President & CEO
jf@cailabs.com, +33 6 38 82 62 89

September 10th, 2024
Defense In Space

Over the past 10 years, we've seen a rapid evolution of the space industry

-95% launch cost per kg



+361% satellite in orbit in 5 years

One of those key technological trends has been Free Space Optical Communication

STARLINK

9000+ lasers / Laser Communications Terminals in space

42 PB+ daily traffic over optical

200Gbps max bidirectional data rate

SDA
SPACE DEVELOPMENT AGENCY

Optical links required in Transport Layer tranches 0, 1, 2

356 satellites under contract

FSOC complements traditional RF, and brings unique capabilities to the warfighter

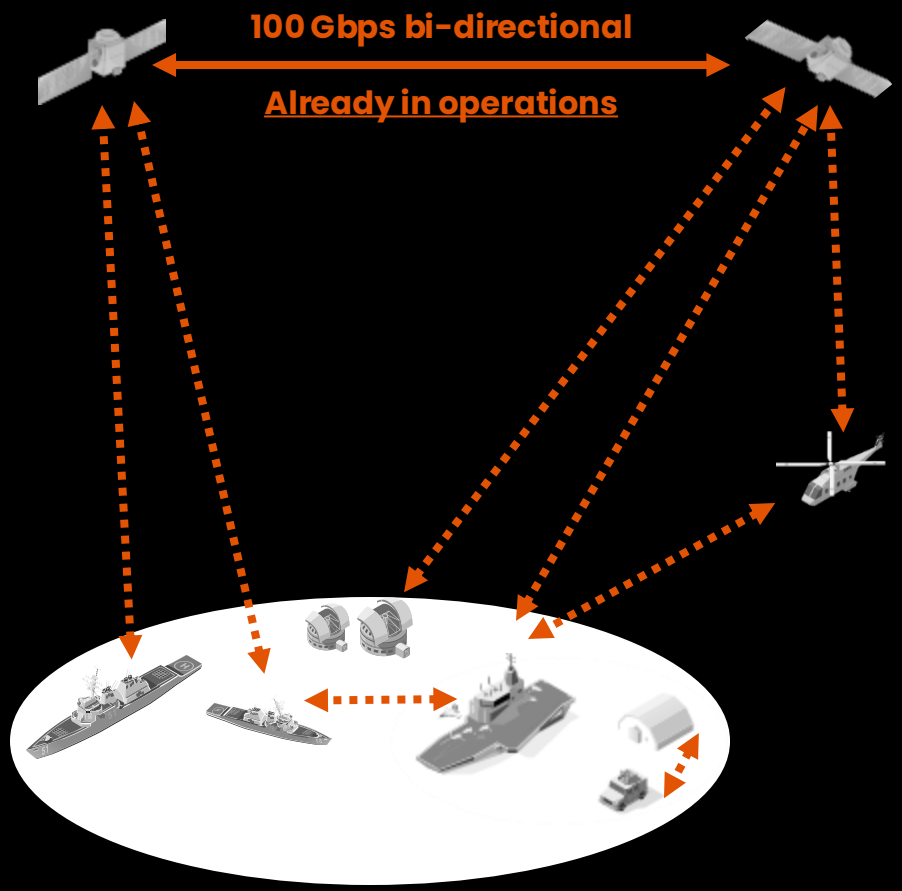
3 fundamental benefits

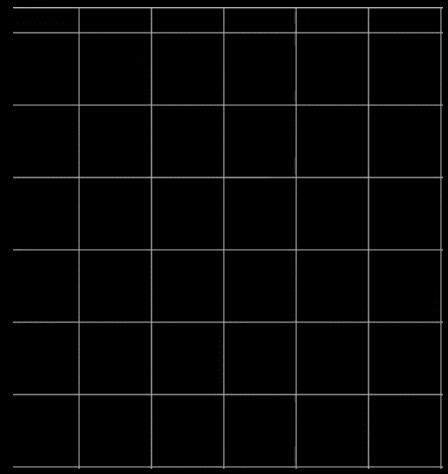
- Optical: No need for spectrum
- Focused: Low probability of detection & interception
- Bandwidth: 100+ Gbps

Specific defense use-cases

- Radio-silent communication for ships in operation
- Rich Earth Observation / ISR data without eavesdropping risk
- Satcom links robust to RF jammers
- ...

Space to ground has long been the missing link to fully deliver on the FSOC promises …





… but it has matured rapidly

unseenlabs
— THE BRIGHT SIGHT

cailabs

SHAPING THE LIGHT

High throughput

Low probability of detection / interception

Jamming resilient

Beyond the lab, out into the field

Translating technology into Operational capability

Call to action