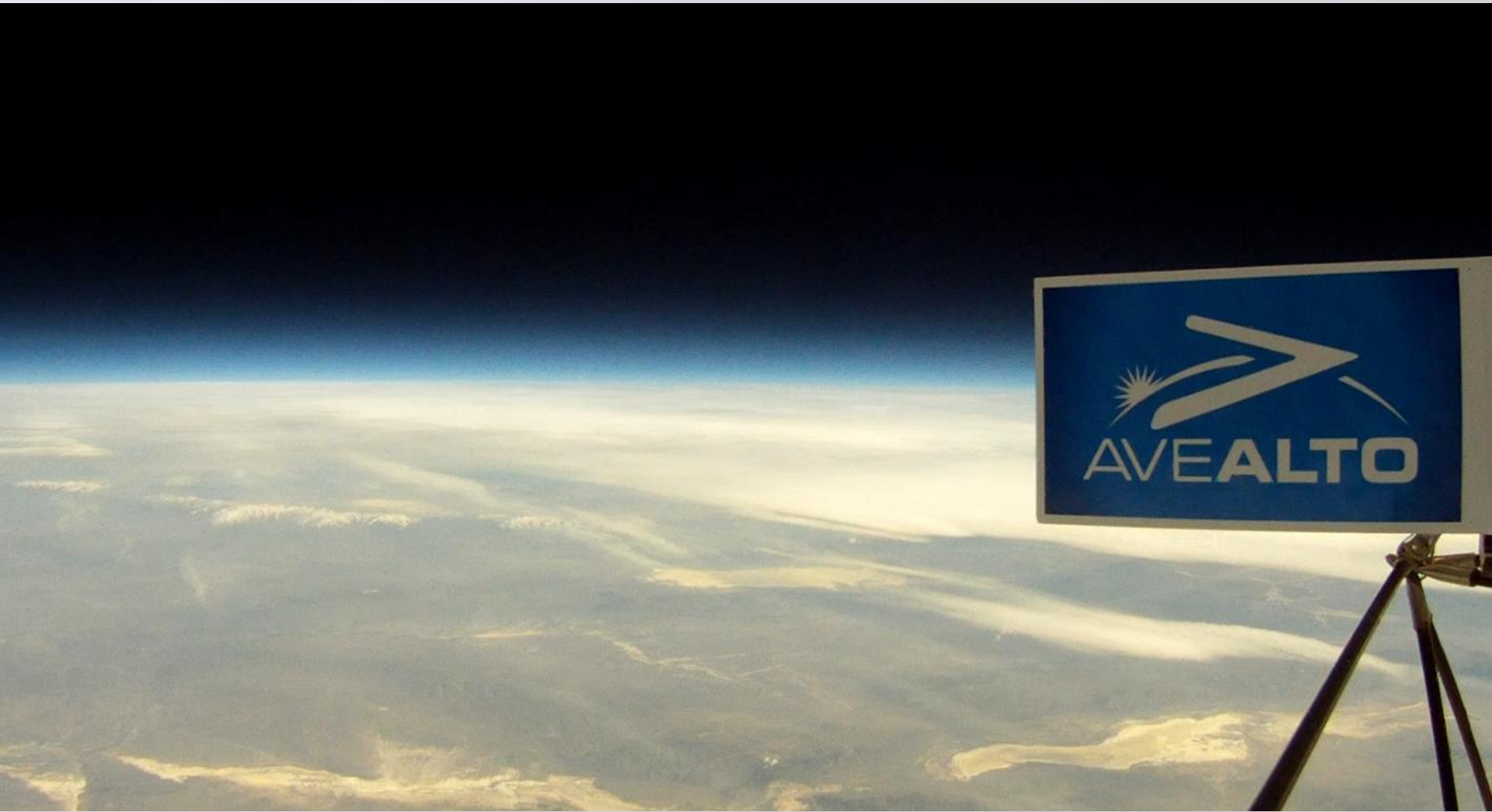


# HIGH ALTITUDE PLATFORMS NOW?

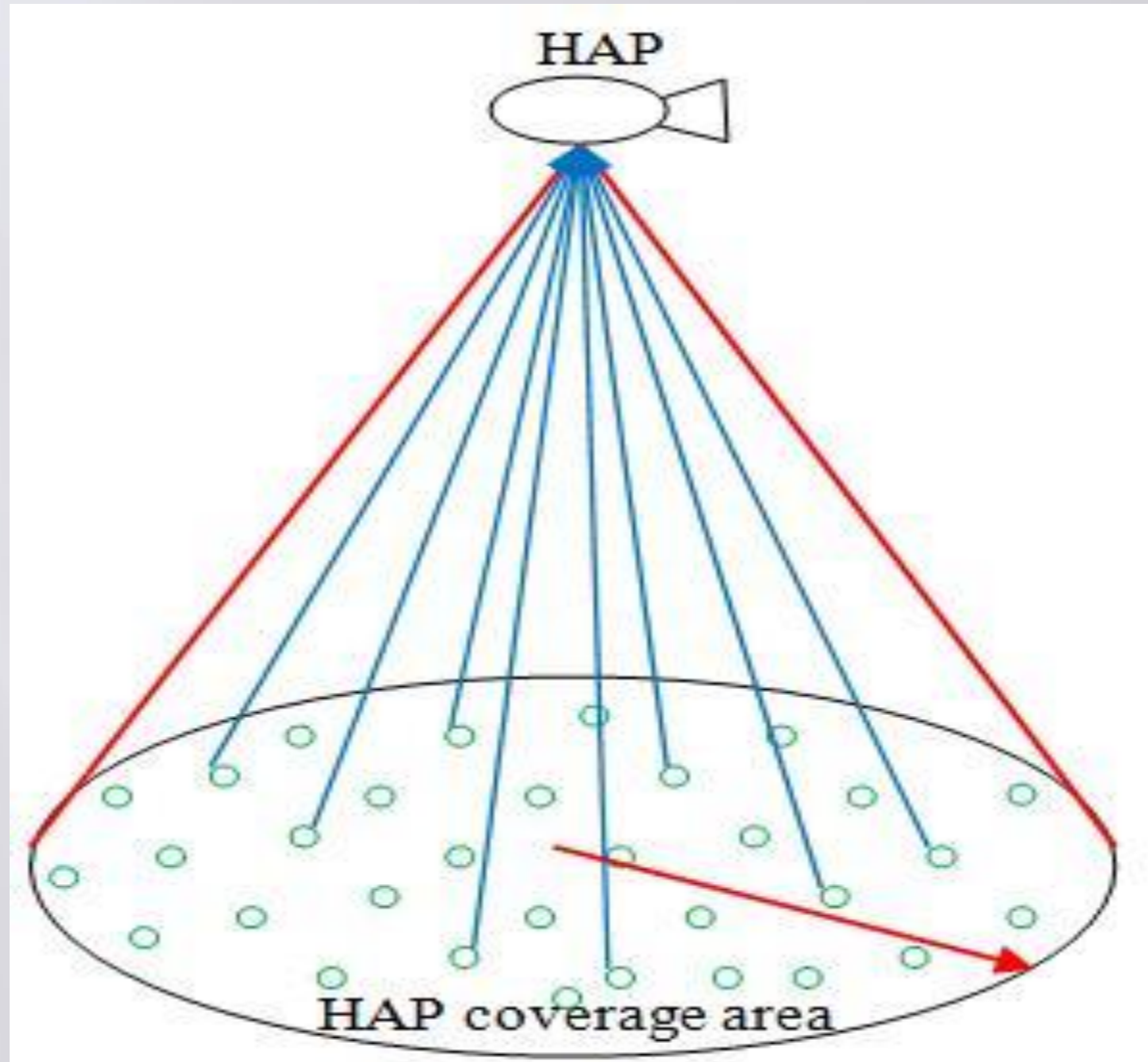
→→→

## TELECOM INFRASTRUCTURE FROM THE STRATOSPHERE





# GEOSTATIONARY – LIGHTER THAN AIR **HIGH ALTITUDE PLATFORM**



# **AVEALTO**

## **HIGH ALTITUDE VEHICLE**

**Remains In stationary position at 20 to 25 Kilometers Altitude**

**Replaces the Functions of Geo-Synchronous Communications Satellites**

Low Latency for Better Voice Quality

Higher Throughput for Increased Data Capacity

Can utilize Existing Ground Stations

**Lower Cost and Better Quality Services**

Mobile Backhaul – Maritime Communications

Aviation Communication - M2M Communications

Emergency Communications Systems

**Performs Other Functions Now Reserved for Satellites**

Geo Location

Topological Studies

Wildlife Monitoring & Vegetation Studies

Weather Forecasting & Observation



**SIGNIFICANT TECHNICAL  
IMPROVEMENTS  
IN 4 AREAS  
MAKE  
HIGH ALTITUDE  
COMMUNICATIONS  
PLATFORMS  
VIABLE NOW !**



# MATERIALS

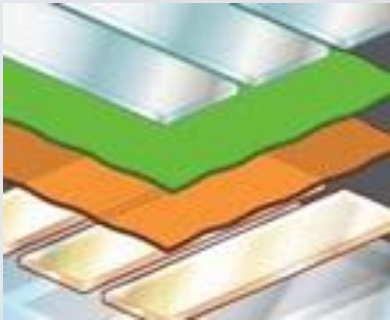
## Lighter and Stronger





# SOLAR CELLS

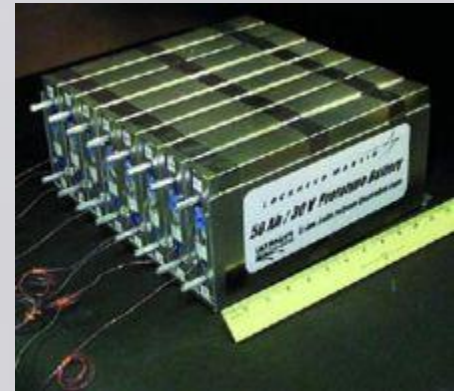
## Increased Efficiency





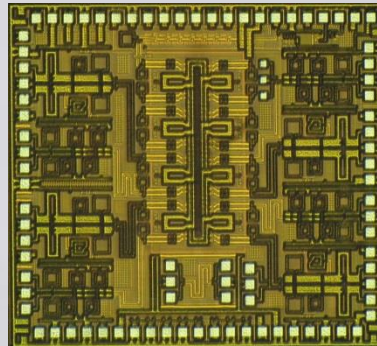
# BATTERIES

## More Power – Less Weight

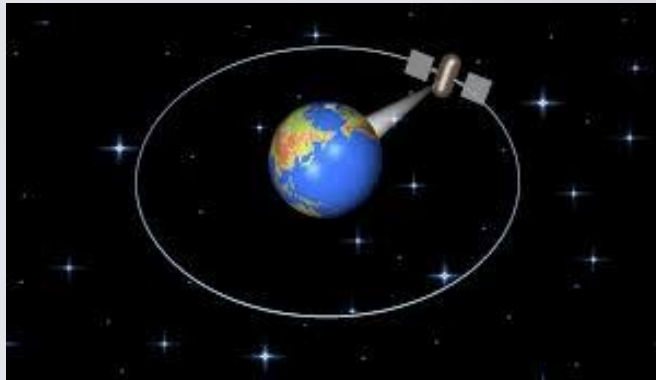


# COMMUNICATIONS ELECTRONICS

Better – Cheaper - Smaller



# **HIGH ALTITUDE PLATFORMS CAN PERFORM SPECIFIC TELECOM FUNCTIONS BETTER & AT A LOWER COST THAN OTHER TECHNOLOGIES**



**GEOSAT**



**LEOSAT**



**TERRESTRIAL MICROWAVE**



**FIBER OPTIC CABLE**



# **FEASIBILITY TESTING IS COMPLETED**

## **AVEALTO HAP VEHICLE IS IN FINAL DEVELOPMENT STAGE**







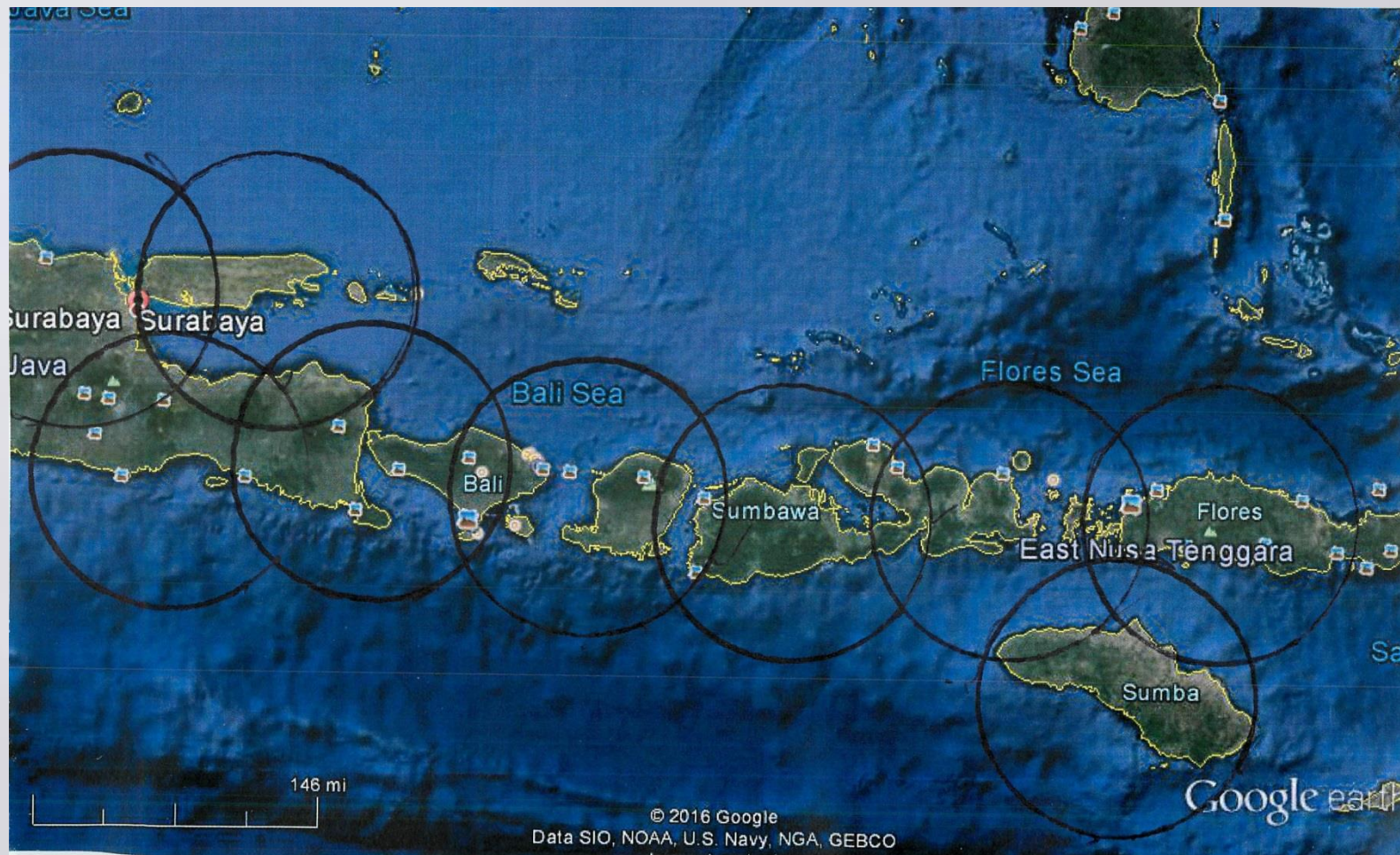
AREA 42:  
BLACK ROCK DESERT - NEVADA  
28 METER (92 FOOT) TEST  
VEHICLE  
SEPTEMBER 16, 2018





# HAP COVERAGE AREA

At a height of 25 kilometers each High Altitude Vehicle will have line of sight of around 565 kilometers (351 miles) in diameter. Due to topological obstacles and radio propagation characteristics, a realistic coverage area for each HAP is around 240 kilometers (150 miles) in diameter over most land areas and around 480 Kilometers (300 miles) over oceans or plains (where the topology is flat).



# AVEALTO PARTNERS



avealto

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