

Proposal to Enhance or Activate Rain

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Proprietary Information

Proposal to Develop an Advanced Technology Aerial Rain Enhancement Platform to End Droughts Around the World



Rainmaker Optionally Piloted Air Vehicle



Optionally Piloted Air Vehicle

Twin Jet Engines

Long Wing Variant

Length: 38 ft
Wingspan: 34/46 ft
Height: 10 ft
Max T/O Wt: 6,200 lbs
Payload Wt w/full fuel: 1,100 lbs
Crew 1-2

Cruise Speed: 350 ktas
Loiter Speed: 85 ktas
Takeoff Distance:: 1,500 ft
Endurance: 5-7 hours
Fuel Capacity: 200+ US Gal
Electrical: 48 VDC – 280 Amps

Air Vehicle Features



Air Vehicle Already Flight Tested

- Extremely low IR signature thru exhaust duct design
- Minimum noise detection thru internal engine location
- Tactical unimproved field takeoff/landing
- 4-7 hour missions



Containerization Capability Already Proven

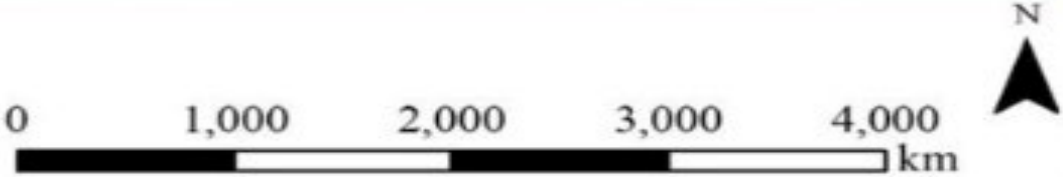
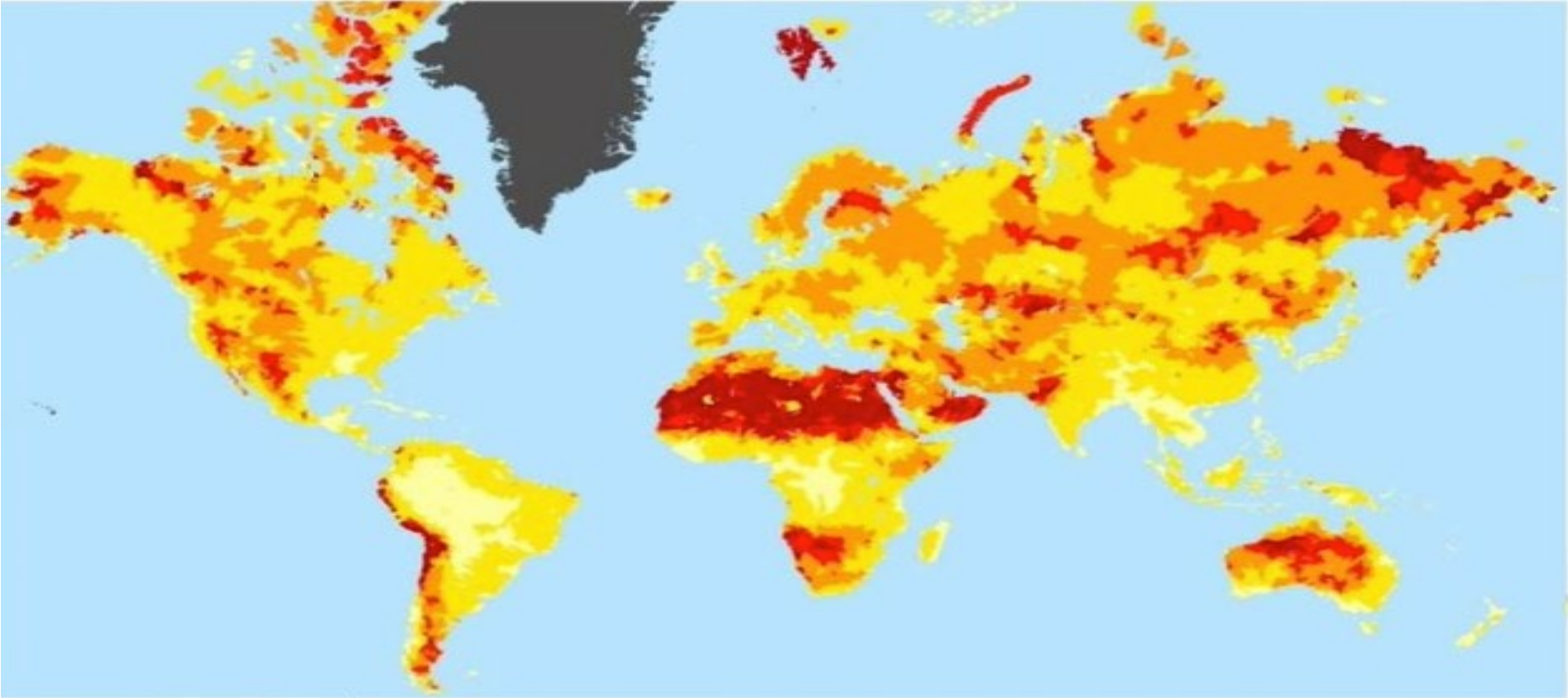
- 3 persons in less than 2 hours (assembly/disassembly)
- Aircraft and all support ships in 2 - 40ft containers
- Ready for ops support <3-4 hours
- Aircraft will ship in single C-130



No Fuel in Wings - Safe HV wiring to wingtips

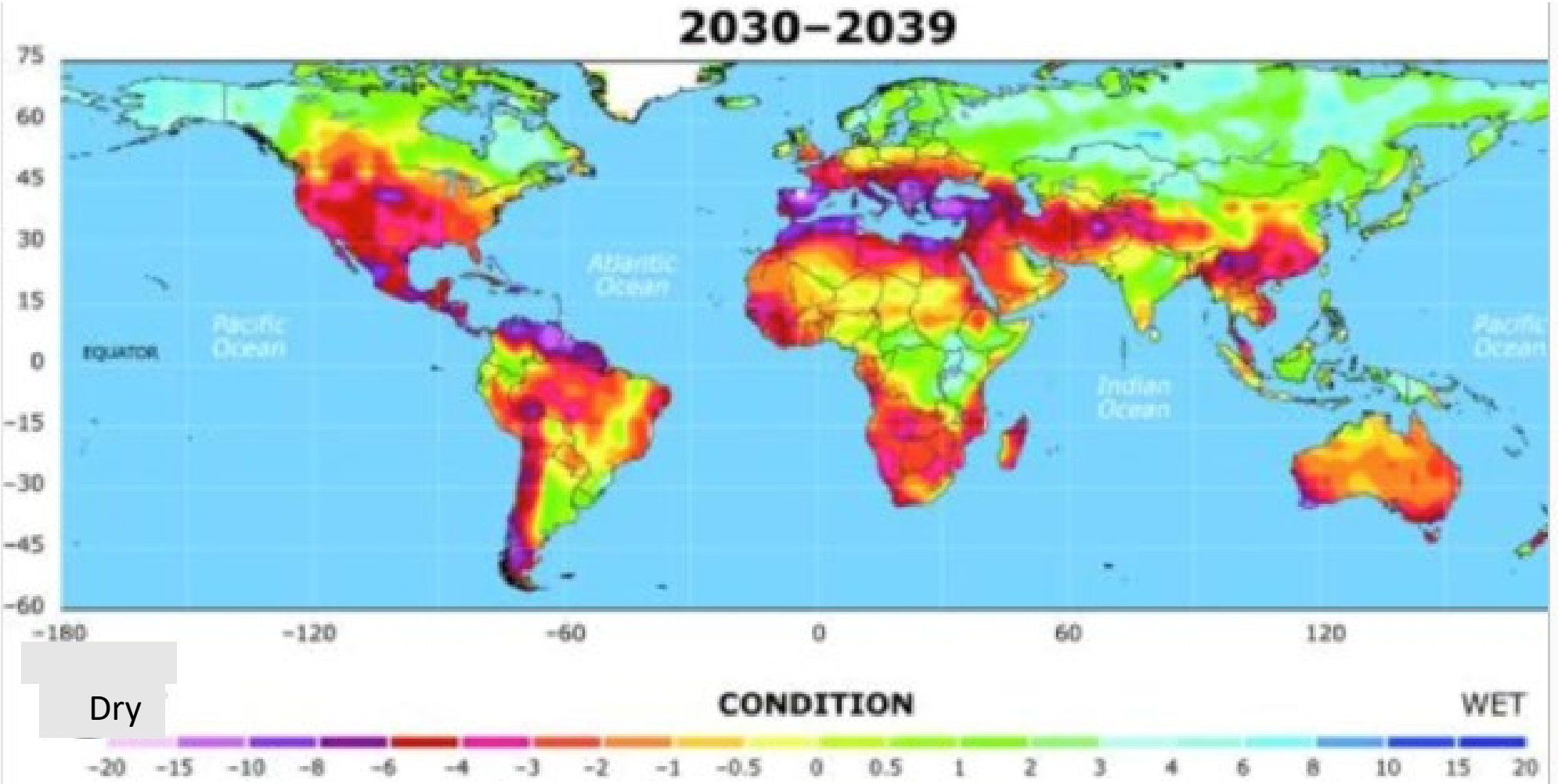
- Long or Short Wing Capability - Operational flexibility
- Wings can be changed in 2 hours
- Mission cruise speed-400 kms per hour - Highly efficient
- Can perform other missions - Emer response, Air transport

Current Drought Conditions



Predicted Drought Conditions

2030-2039



Drought Conditions



The number and duration of droughts has increased by 29 percent since 2000, as compared to the two previous decades. When more than 2.3 billion people already face water stress, this is a huge problem.

UAE

Like many Middle Eastern countries, the UAE experiences heavy droughts as a result of the dry climate, receiving only 10 inches of rainfall a year. These droughts have left the UAE without water for longer periods of time and it's only getting worse, declining 20 percent in the last 30 years.

Droughts have killed the most people in the world's worst natural disasters over the last 50 years - Report from the Insider

What is the Best Approach to eliminate Droughts?

**We say: Rain Enhancement
-- but can it be done?**

- Dr. Theodore Anderson CEO of Haleakala R&D, Inc. says -- **yes** -- with the development of
“The Rainmaker”



Existing Rain Enhancement Approaches

- Many commercial and government programs have attempted to seed clouds with Silver Iodide or other chemicals
 - Average success rate: 6 percent increase in rain -- not enough to eliminate droughts

Haleakala R&D, Inc. is aware of two nations who have partnered over the last decade to employ a ground-based electrical beam approach to excite clouds to produce additional rain

- Average success rate: 18 percent increase in rain -- Approach is limited because it relies on updrafts for effects to reach the clouds -- Still not enough rain to eliminate droughts



Ground-based System

Advanced Technology Rainfall Enhancement System



- The advanced technology Haleakala R&D, Inc. is to develop “Rainmaker Optionally Piloted Jet Vehicles” to inject a strong mixed electrical beam signal directly into clouds.
 - Dr. Theodore Anderson in a peer-reviewed scientific paper, has concluded that the patented science in the Star Systems’ mixed electrical beam aerial approach for Rain Enhancement is “solid”.
 - Star Systems estimates that a 60 to 70 percent increase in rainfall amount can be achieved. This increase is enough to eliminate droughts around the globe

Prototype Rainmaker Schedule

