

The safest aerial railroad is a large drone equipped with a toilet and a wooden double-structured cabin that seats 4 to 12 people and is powered by a wire while preventing it from falling. It is thought that it will become the mainstream of transportation in the future as a convenient vehicle.

No wires are set near the ship's route or port, and it is battery-powered, driven at 1m above the ground on land and 3m above the sea, so even if it falls, it will float on the water and cause injury. not reach.

## <Aerial Wire Railway (=AWR)>

<Connecting the world with an aerial railroad> At the Osaka Expo, the theme will be 'Japan, the land of beautiful oceans and landscapes', a smart city with 100% renewable energy, and the world's safest vehicle, 'Connecting the world with an aerial railroad'. We made a request to the Ministry of Land, Infrastructure, Transport and Tourism, the Ministry of Economy, Trade and Industry, the Digital Agency, etc.

In the recent evening edition of the Asahi Shimbun, the headline "U.S. Air Force, all Osprey CV22 aircraft on standby," read, "The U.S. Air Force has issued a statement that two accidents have occurred in the past six weeks, and that until the cause is investigated, there will be an indefinite period of time. Military aircraft such as the Osprey use parts of a higher grade than general equipment according to military standards, making it less likely to break down, but the Osprey nevertheless There is information on crashes in various places, and it is well understood that the market failure rate cannot be reduced to 0. In other words, self-driving cars and flying cars at legal speeds are very dangerous and cannot be operated.

"Aerial Railway" is a wired safety flight system: Patent No. 6436468 and a drone power supply system: Patent No. 6430057. Wires are used as lifelines, electrodes are set, and a pantograph is set on the drone side. You can connect the world while supplying power and using the wooden artificial island: Patent No. 7112150 as a transit point.

"The theory that the market failure rate cannot be reduced to 0" Aiming for a market failure rate of 0, even if we thoroughly analyzed past failure cases at the most sophisticated factory, the limit was 0.01%. According to a veteran engineer at Hitachi, the maximum failure rate in the market for cars is about 0.1%.

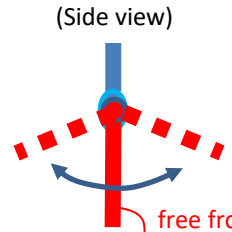
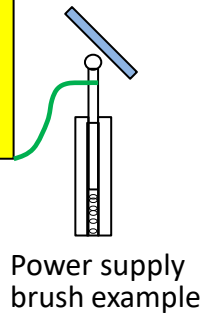
The Space Shuttle had a history of abandonment from the perspective of the market failure rate, and it is necessary to proceed with the vehicle while always considering the accident risk (assuming a certain amount of accidents).

# AWR = Aerial Wired Railway

## < Safety measure >

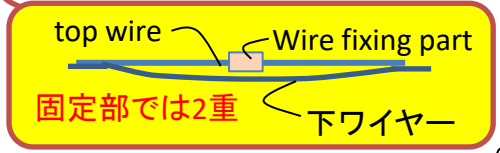
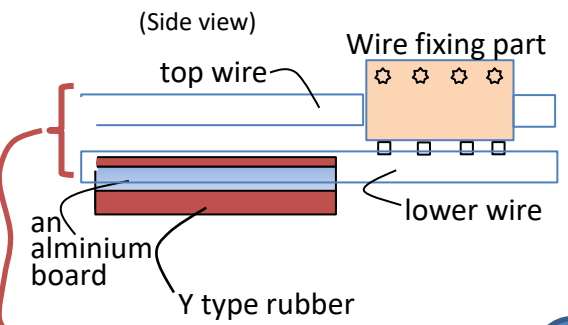
- ① 2 power supply & motor propelle
- ② Wired safety mechanism
- ③ Double structure of guest rooms +

**feeding brush**  
 You can set it inside the distance sensor. It is necessary to devise ways to keep the contact pressure with the aluminum plate constant. (combination of pressure sensor and movement mechanism, etc.)



Safety guide

No problem even if it bumps a little distance sensor



Acquired various international patents and became a major export industry for a Japanese consortium



Monitor: Choose an AI avatar of your favorite character and have a fun conversation as a tourist guide who can ask questions.

The power supply brush must maintain contact pressure with an appropriate spring force, assume some kind of failure, prepare 2 to 3 pairs, and aim for a failure rate of 0. Two pairs of short-range sensors are also prepared, and power is supplied from both towers.

The cabin will have a double-layer structure made of wood, and the middle part will be a shock absorber, and even if a low-flying rose within 10m falls, the outside of the cabin will be destroyed, but human life will be protected and the impact will be less than bruising. (There are no windows, and images from four cameras (north, south, east, and west) can be viewed on four wall-mounted TVs inside.)  
 In areas without wires, it will fly at a low altitude of 1m or less on land, with a maximum altitude of 1m. At sea, within 3m, maximum within 30m)

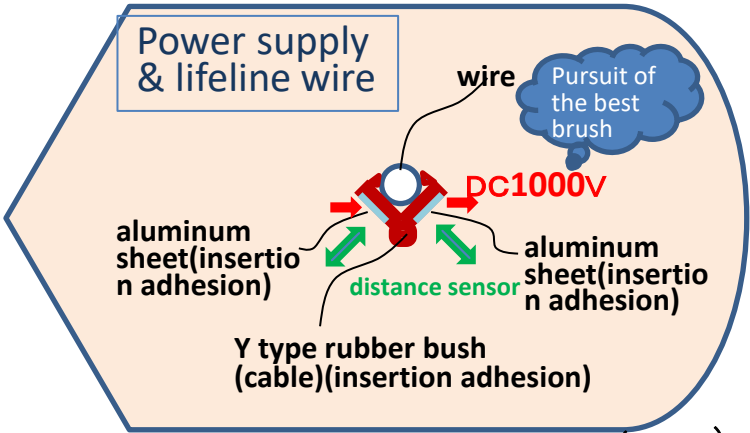
# Wired Supply Safety Flighting System

In general areas such as urban areas, build a steel tower, stretch the following "power supply & lifeline wire" to flow DC 1000V, set the power supply brush on the drone side, and construct a "3W" power supply system. (equipped with the minimum required battery)

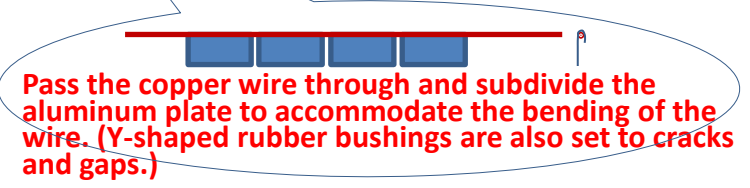
However, in undeveloped areas such as grasslands, swamps, and rivers, we will frequently set up stops and battery exchange stations (or hydrogen tank exchange stations) based on low altitude and battery drive without wiring.

**Even if one fails, it still functions.**  
1W = Feed from both sides of the tower.  
2W = 2 pairs of distance sensors on the drone.  
3W = 2 pairs of power supply brush settings for the drone.

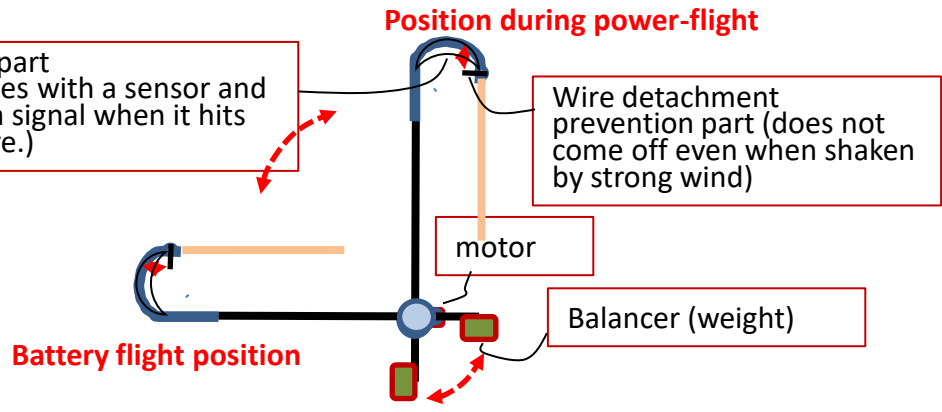
**The thin aluminum plate doubles as a receiving surface and an electrode for the distance sensor.**



An aluminum plate of 3 to 10 (length) x 0.02 to 0.06 (width) x 0.001 to 0.002 (thickness) and a Y-shaped rubber bush of 3 to 10 are fitted and glued, and the connecting part of the aluminum plate is Leave a gap of about 2 mm (considering the difference in coefficient of linear expansion) and apply conductive adhesive.



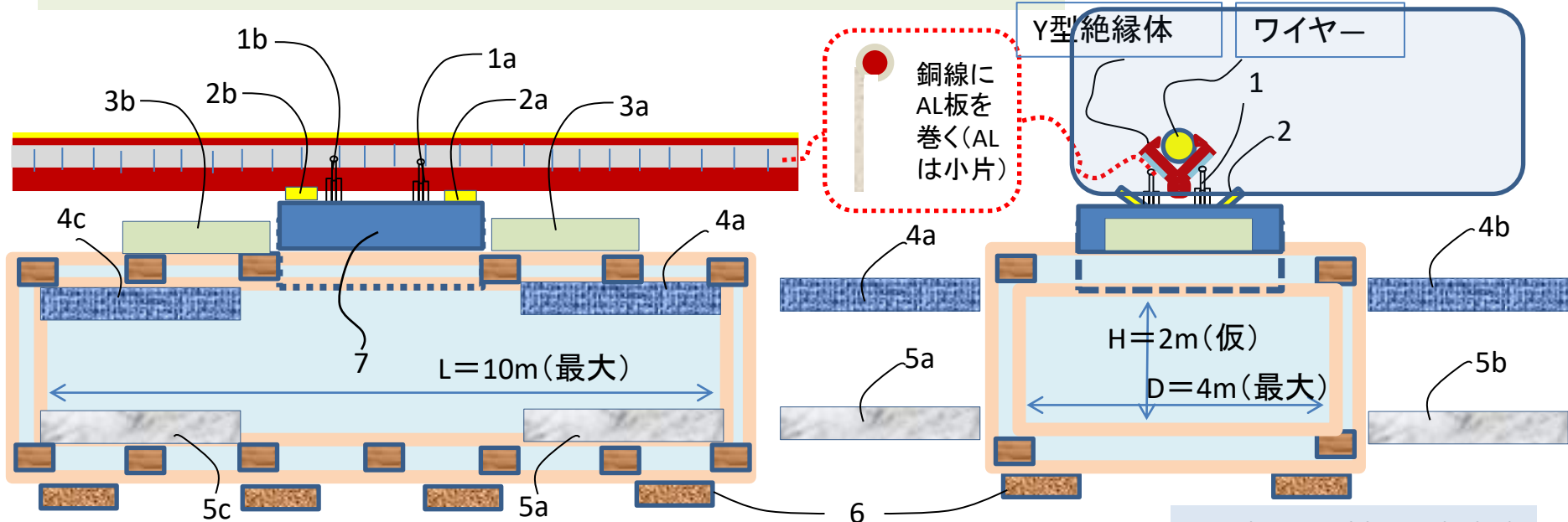
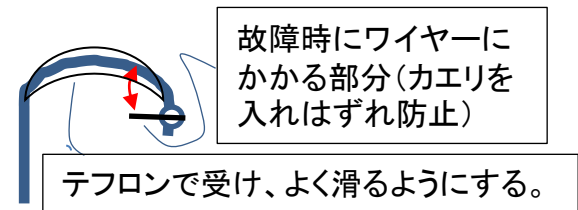
Teflon part (It comes with a sensor and emits a signal when it hits the wire.)



**wireless low altitude flight**  
**Publicize the drone route.**  
In areas surrounded by rivers and mountains, isolated islands, etc., or in winter in desert areas and snowy regions, the battery capacity is increased without wires (the weight is reduced by accommodating two people or less), and the flight time is about 15 minutes or more. It can be so. At each port, an automatic battery exchange station & water current power generation and tidal current power station will be installed.  
**(Risk of falling)**

通勤電車の車両の価格は約1.2億で、120人くらいが定員なので、一人あたり、100万円程度・・・

→12人乗りで、木造二重構造の客室のドローンが600万程度と想定し、一人あたり50万円なので、コストは約[1/2]



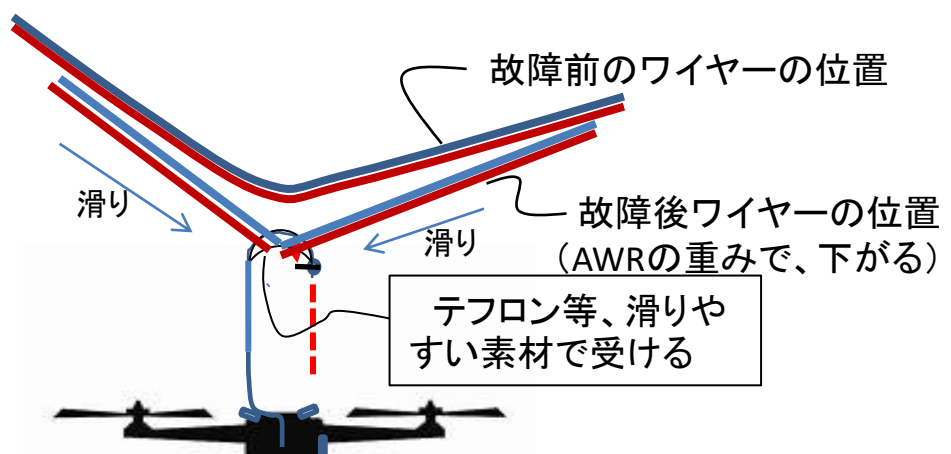
AI robot washlet included

1	ばね式接点(2対)	1万x4=4万	6	ゴム足(4~8個)	2万~4万	カメラ(内2&外3式)	10万
2	距離センサー(2対)	1万x4=4万	7	CPU/GPS/通信機能	10万(専用IC)	大型壁掛けTV(3式)	30万
3	蓄電池(2系統)	20万x2=40万		二重構造木材本体	200万	AI翻訳マイク(2~12本)	12万
4	上プロペラ(4対)	12万		空調	20万	匂いのしない水洗トイレ	140万前後
5	下プロペラ(4対)	12万		リクライニング椅子	120万(12席)	<b>総コスト:12人乗り仕様</b>	<b>600万前後</b>

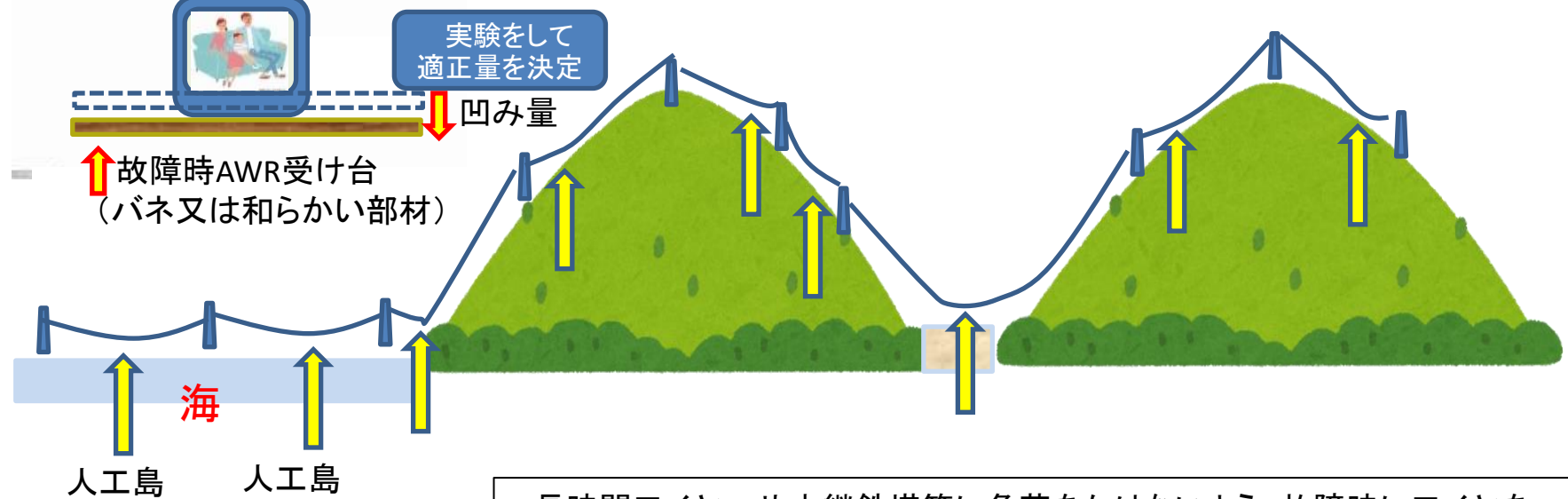
木造二重構造客室のドローン:50台以下の小ロットでのざっくりとした予測の価格、1000台以上なら半額の可能性あり

### Recovery system in case of AWR failure

＜複々線が標準＞「ANA & JALの競争」メンテナンスや故障でAWRを止めない。



海上では、船が隣接しクレーンで交換する。陸上では大型トラックにリプレイス用のAWRを用意して、トラック付帯のクレーンで交換する。道路は、リプレイス用の大型トラックが通れるようにする必要があるが、それ以外の道路は不要で、鉄塔とワイヤーでいくらでも延長できるので、便利で安全で安く、長距離が可能であり、また雪に強いというメリットがある。



↑ = AWR受け台箇所

長時間ワイヤーや中継鉄塔等に負荷をかけないように、故障時にワイヤを引っ張りながらも停止する位置には和らかい、あるいはバネ性の受台を用意する。尚、海上では人工島(礎を下ろし動かないようにする。)を設定し、その上に受け台を用意する。(海上では、重量増加による沈み込みを利用)



## 第一段階：2030年運用

## 全再エネの 関西空中鉄道構想

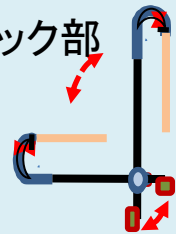
第一 & 第二レーン: JAL  
第三 & 第四レーン: ANA

4レーン ワイヤー  
給電兼命綱用途  
: 各引込型ポート

人工島: 無人コンビニ、海鮮AI食堂(各種トラブル対応や食材の搬入等で、3交代制での人は要る。)無人レンタル仮眠室ルーム、無人雀荘、無人カラオケ、無人釣り堀等...

各人工島の出資者を世界中から募り、あるいは各県から募り、特産物の店舗を出す等、特色あるミニホテル化することで、新たな観光名所となり、関西の魅力が増大する。

AWRフック部



船舶通路の箇所では、フック部を横に寝かせ、早めにワイヤーから、離脱し、海上3m程度で飛行し、万が一の故障・落下時でも、衝撃は少なく、また水に浮くので、全く問題がない。

給電ワイヤー ワイヤー鉄塔

人工島

(船舶通路)

人工島

給電ワイヤー

AWR飛行ルート

関西国際  
直通電車で  
できる大関