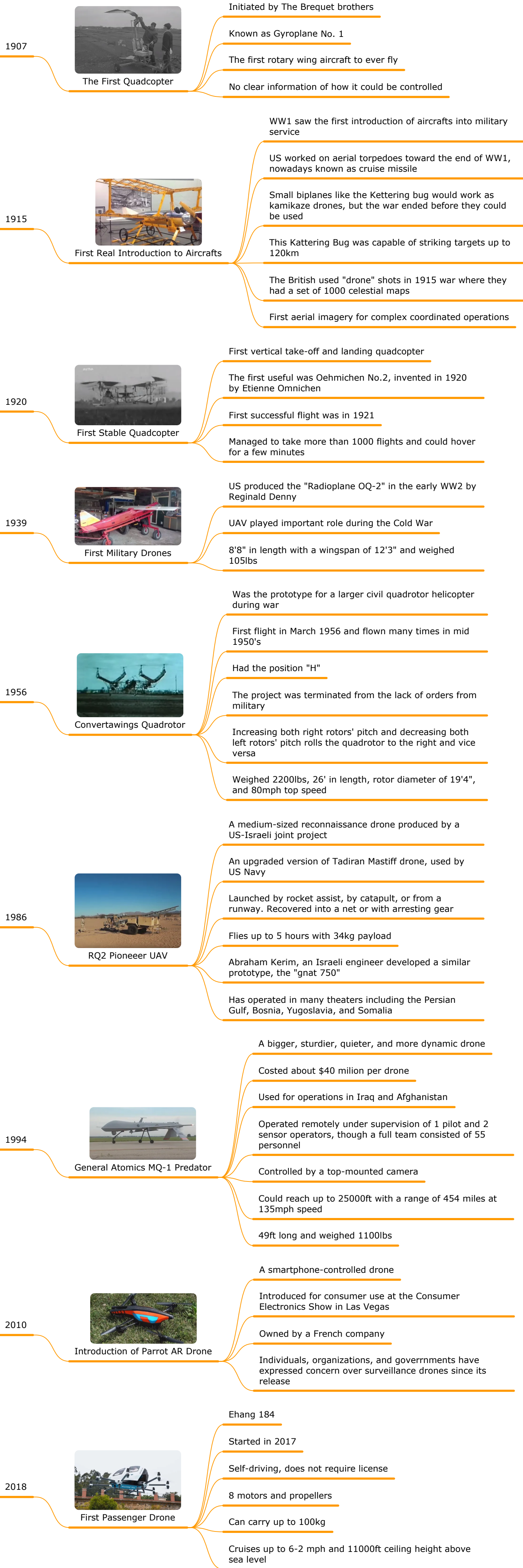




DJI AGRAS T30

UAV

History



Robot Body Design vs Tasks

Body Design

Total weight (without battery): 26.4 kg

Maximum take-off weight: 76.5 kg (near sea level)

Maximum thrust-to-weight ratio: 1.7 @ takeoff weight of 66.5 kg

Maximum rotor distance: 2145 mm

Dimensions:
2858 mm × 2685 mm × 790 mm (with arms and blades unfolded)
2030 mm × 1866 mm × 790 mm (with arms unfolded and blades folded)
1170 mm × 670 mm × 857 mm (with arms folded)

Tasks

Crop protection

Actuators/Locomotions

Motors with 18.7 kg/rotor maximum pull

Motor ESC - 60A continuous current and 60.9V (14S LiPo) maximum operating voltage

38×20 inch propellers

Water pump with 60V operating voltage and maximum flow of 4 L/min

16 nozzles with 4-9 m maximum effective spray width

T30 Spreading System 3.0 - applicable for solid dry particles with 0.5-5 mm diameter

Navigation System & Controller

FPV cameras:
FOV: 129° horizontal, 82° vertical
Resolution: 1280×720 15-30 fps

FPV searchlights with 13.2 lux maximum light intensity @ 5m direct light

Omnidirectional obstacle avoidance radar
Model: RD2424R
Power: 12W
Height measurement range: 1-30 m
Maximum mountain slope: 35°
View angle: 360° horizontal, ±15° vertical
IP67 rating

Top-view radar
Model: RD2414U
Power: 4W
Perceivable distance: 1.5-10 m
FOV: 80°
IP67 rating

Remote control

Model: RM500-ENT
Positioning: GPS+GLONASS dual mode
Display screen: 5.5" wireless display screen with 1920×1080 resolution, Android-operated
RAM: 4GB LPDDR4
ROM: 32-128 GB microSD
Power: 18W

Data Collection



Autonomous Operation with Optimal Route Planning

Data Transmission

Wi-Fi: Wi-Fi direct, 802.11 a/g/n/ac, supports 2×2 MIMO
Wi-Fi
Frequency: 2.4/5 GHz
Signal range: 5/4/7 km
Bluetooth: 4.2, 2.4-2.4835 GHz frequency

Battery

Drone

Model: BAX501
Weight: 10.1kg
Discharge rate: 11.5C
IP54 rating
Capacity: 29000 mAh
Voltage: 51.8V

Built-in

Capacity: 5000 mAh
Voltage: 7.2V
Battery life: 2 hours
Charging time: 2.5 hours

Remote control

External smart battery

Model: WB37
Type: 2S Li-Po
Capacity: 4920 mAh
Voltage: 7.6V
Battery life: 2 hours

T30 smart charging manager

Input voltage: 100-264 VAC
Output voltage: 40-60 V
Rated power: 7200W
Charging current: 120A
Charging time: 9-12 minutes
Output channel: 2
Safety: AC wire protection, power wire protection, and charge connector protection

