



Towards an Air Mobility Revolution with Flying Cars and Cargo Drones



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CTO, SkyDrive Inc.

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1

Safety standards discussions for next generation aircraft

Japan Civil Aviation Bureau (JCAB) has been taking the lead in discussions with the government and industries to establish and develop each safety standards for next generation aircraft (e.g., Urban Air Mobility).

Aircraft Safety Provisions

WG

Airworthiness Standards

Pilot Certificate

WG

Requirements for the license

Operational Safety Standard

WG

Operation method/
Flight Altitude/Airspace

Vertiport

WG

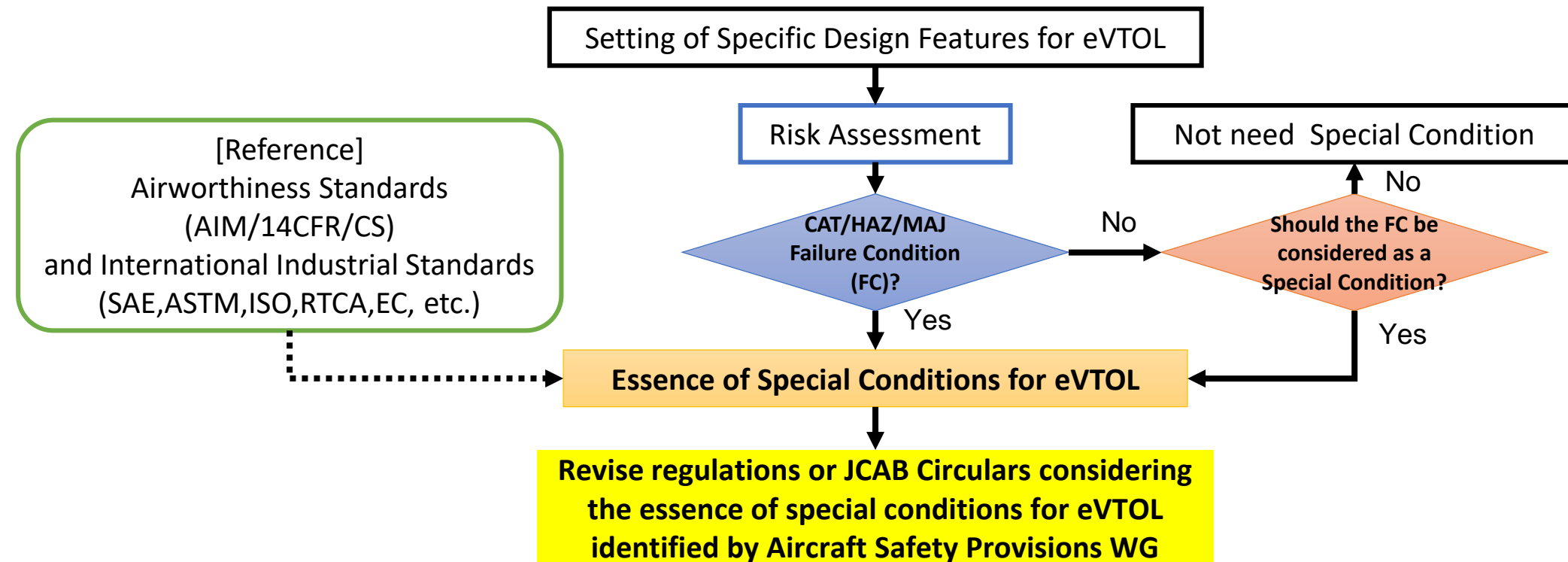
Requirements for vertiport,
operation environment
and infrastructure

Air Transport Service SG

Requirements for Air Transport Service

Special Conditions for eVTOL are discussed under the Aircraft Safety Provisions WG.

Based on the Airworthiness Inspection Manual (AIM) Part II (equivalent as 14 CFR Part23, CS-23), we are discussing special conditions for eVTOL in Japan.



2

SkyDrive company overview

Mission & Vision

Our Mission

100年に一度の
Mobility革命を牽引する。

Taking the lead in the once-in-a-century mobility revolution

Our Vision

空を、走ろう。

Beyond Drive.

Company Overview

Company Name	SkyDrive Inc.
CEO	Tomohiro FUKUZAWA
Business Areas	Development/Manufacturing/Sales of eVTOL, “Flying Cars” and Cargo Drones
Established	July 2018
Head office, R&D Base	JAPAN (Toyota City, Aichi)
Offices	Shinjuku Ward, Tokyo and Osaka City
Number of Employees	171 as of September 2022
Fundraising amount	Cumulative total raised through stocks: 14.7 billion yen

Key Members



Tomohiro Fukuzawa
Founder & CEO

TOYOTA MOTOR CORPORATION



Nobuo Kishi
CTO & Certification

MITSUBISHI
AIRCRAFT CORPORATION
MITSUBISHI HEAVY
INDUSTRIES, LTD.



Takehiro Sato
CHRO

SIGMAXYZ Holdings Inc.



Hiromi Go
CFO &
Administration Manager

Morgan Stanley
Universal Materials Incubator
Co., Ltd.



Hiroyuki Murai
CSO

Recruit Strategic Partners, Inc.
Macromill, Inc.



Yugo Fukuhara
Head of Air Mobility Div.

MITSUBISHI
AIRCRAFT CORPORATION
MITSUBISHI HEAVY
INDUSTRIES, LTD.



Toshio Narimatsu
Head of Cargo Drone Div.

Experience in design and
manufacture of molds
etc. at manufacturers.



Phillip Sheen
Aircraft Performance &
Integration

BOMBARDIER
MITSUBISHI
AIRCRAFT CORPORATION



Shigeyuki Sugiyama
Battery/BMS

Panasonic Corporation



Mark Blackwell
R&D Strategy Senior
Manager

BAE SYSTEMS



Toshio Ando
Technical fellow / Air
mobility pilot

Build and control drones
for 40 years



Naohisa Morishita
Aircraft Development

Honda Motor Co., Ltd.

Our Products

Air Mobility

Ultra-light and compact flying vehicle that requires no runway.

- Door-to-door transportation anywhere
- Easy to drive with autonomous control technology
- Low cost through electrification and mass production



Cargo Drone

Manpower savings by automation in transport of heavy cargo up to 30 kg.

- Automatic transportation through the sky, even in environments with altitude differences
- High level of safety using knowledge gained from the development of flying cars
- Hoist option that allows unloading without landing



3

What is an eVTOL “Flying Car”

SD-05

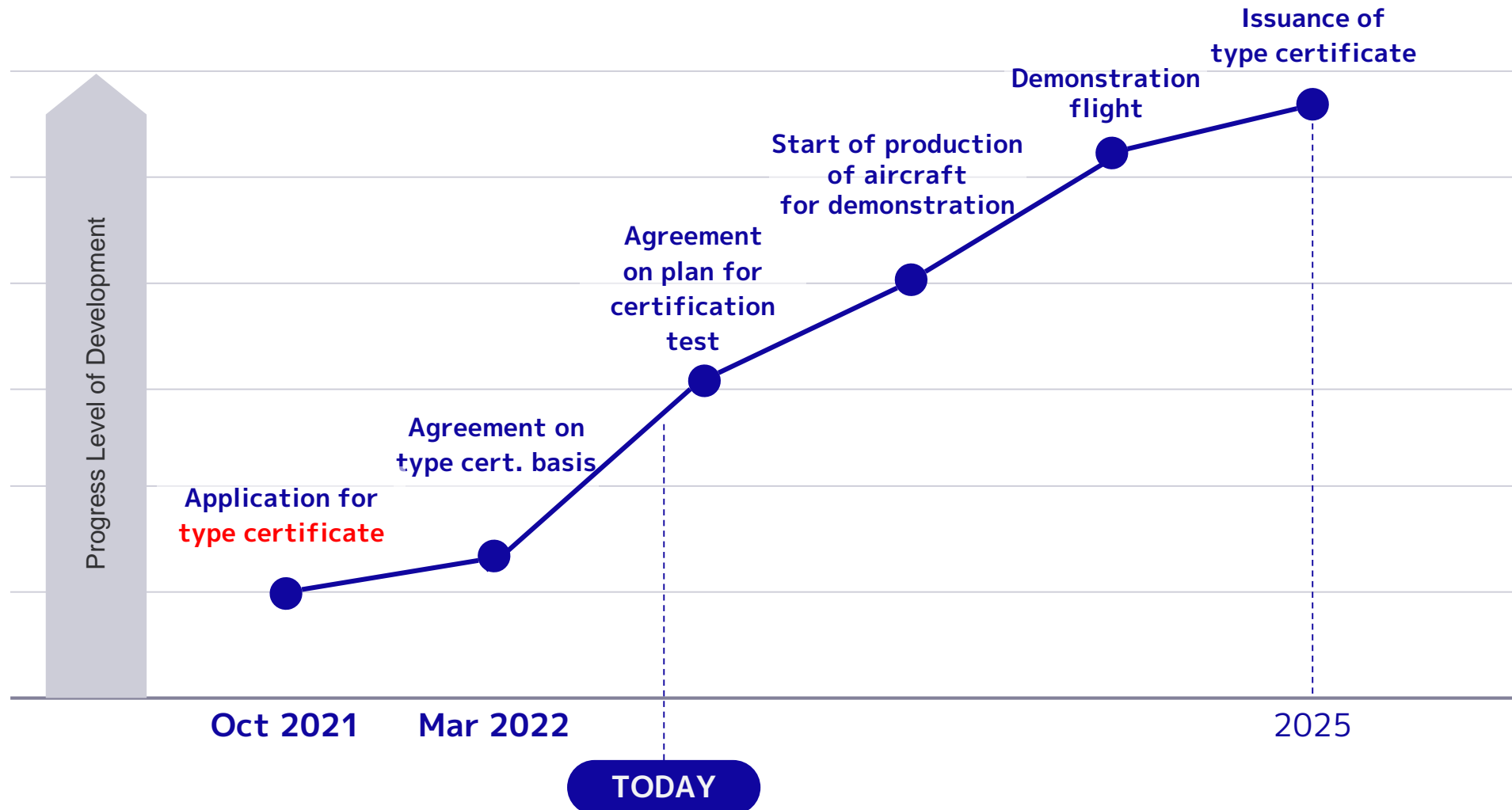
All-electric, vertical take-off and landing (eVTOL) multi-copter type aircraft.
We plan to get SD-05 Type Certificate (TC) and launch air taxi service in 2025.

Source:<https://en.skydrive2020.com/archives/7418>



SPECIFICATIONS	
Dimensions (L×W×H)	9.4m×9.4m×2.7m (incl. rotor)
Seating Capacity	TWO (including pilot)
Power Supply	Battery Electric
Propulsion	12 units of motors/rotors
Main Structural Materials	Composite, Aluminum alloy, etc.
Maximum Takeoff Weight(MTOW)	1,100kg(2,400 lbs.)
Maximum Cruise Speed	100km/h (airspeed) (54 KIAS)
Operational Flight Range	5-10km (subject to operational condition)
Operational Flight Time	5-10minutes (subject to operational condition)

SkyDrive development progress in correlation to JCAB Type Certificate



Main Characteristics and Advantages of Flying Cars

Battery-powered

Low cost
Low noise level
Zero CO2 Emission

Autonomous flight

Simplified operation
Autonomous flight

Vertical take off and landing

Small Infrastructure
Point-to-point transit



Noise, difficulty of operation, and price of vehicle
closer to a car than to an existing aircraft.

Enable daily use of the sky.

Thank you !



youtube