

# The Future of Flight - Man and Machine



SKYRYSE



# Howard Kass

VP, Government and Legal Affairs  
Skryyse



Skryyse Proprietary and/or Confidential



# The Future of Automation in Flight

# Current State of Automation:

“I can’t stand this indecision  
Married with a lack of vision”

Tears for Fears. “Everybody Wants to Rule the World.” *Songs from the Big Chair*, Mercury Records, 1985.

Skyrise Proprietary and/or Confidential



We can't determine the future, until we  
**agree** on the questions.



# QUESTION #1: What are we trying to automate?

- Where can automation improve safety, without introducing additional risk?
- Isn't it about safety first?

## Flight Tasks

- Planning
- Preflight inspections
- Remote Piloting
- Taxiing
- Aircraft handling
- Communication
- Takeoffs & landings
- Systems management
- Decision making
- Navigation
- Emergency procedures
- Detect & avoid
- Full Automation



## QUESTION #2: What is AI's role in Automation?

And, if there is a role - is it

Generative AI or

Deterministic Expert AI

AI IS NOT ONE SIZE FITS ALL



## QUESTION #3: What is the regulatory path?

- What does the regulatory path cover?
- How will differing standards across jurisdictions work?





## QUESTION #4: What about the human?

- What is the human/machine interface?
- What is the role of the pilot?



# About Skryse

Skryse Proprietary and/or Confidential



# Skyrise Mission

A new era in flight, where fatalities are nearly zero, piloting any aircraft is simple and safe, and the sky is accessible to all.

TM

# Meet SkyOS

The simplest, safest, and  
smartest system in the sky



# SkyOS is the only operating system for flight



Powered by SkySentinel™, our proprietary flight control computer

Skyryse Proprietary and/or Confidential





# We have mastered the flight controls of aircraft, to a level no one in history has achieved

On July 22nd, 2023 we accomplished the world's first **fully-automated autorotation** (emergency landing) of a helicopter.

We simulated the loss of engine, tail rotor, radar and GPS.



The Guinness Book of World Records certified Skyryse as the first fully-automated autorotation

Skyryse Proprietary and/or Confidential

# SkyOS a fully-integrated, command platform

## SkyOS

a completely integrated system providing total aircraft control

### Skryse Pilot Interface

Touchscreen  
Displays



Control  
Stick



### Skryse Under the Hood

#### SkySentinel™

Computers, IMU,  
air sensors, motor  
drivers, backup  
power, engine status

#### Navigation

GPS, FMS, TAWS,  
traffic, charts, maps


#### Aircraft Systems

Fuel valves,  
sensors, brakes,  
steering,  
pressurization


#### Communications

VHF, ADS-B


  
Weight Neutral  
or Savings


  
Same Hardware  
Any Aircraft

  
DAL-A  
Software Assurance

  
Only 1 Failure  
Every 114K Years

  
Fully  
Self Contained

  
Simple  
Installations

  
1/5  
Number of Parts

The **SkyOS** technology system is an elegant, flexible, and configurable architecture, **replacing over 100 analog parts**



..... 13' .....

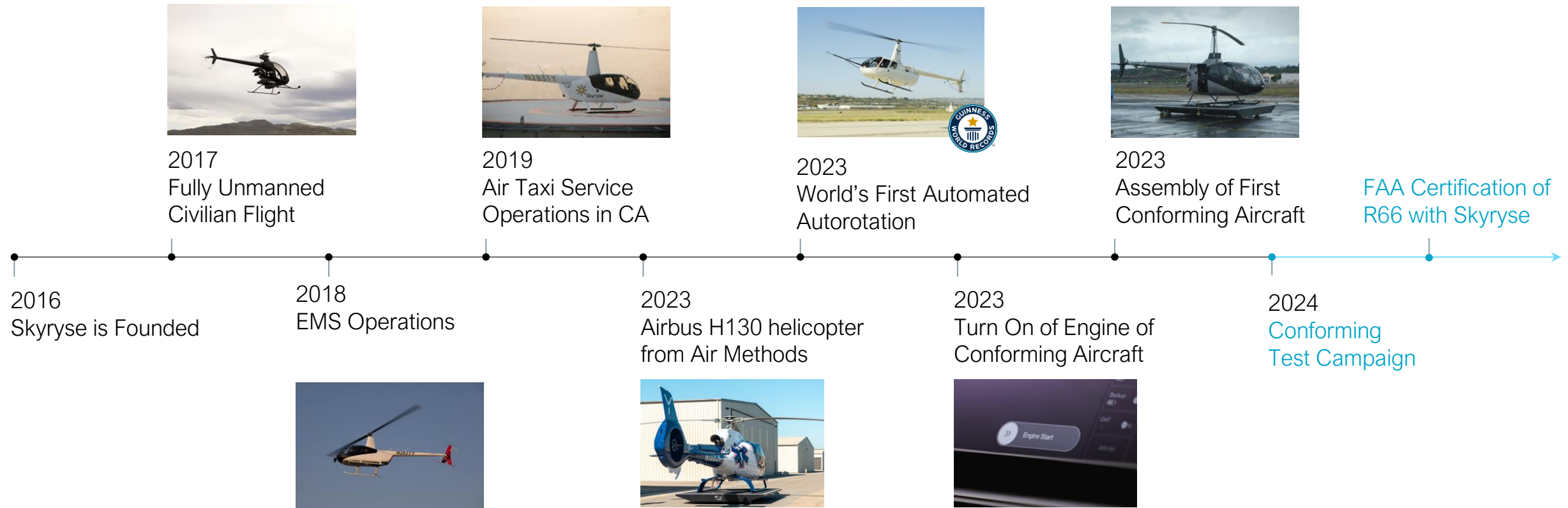
Our system removes **329 potential points of failure** from the factory standard Robinson R66



Skyyryse Proprietary and/or Confidential



# An 8-year mission to make aviation safer



2019  
Rotorcraft Cert. Plan FAA Approved

2022  
Fixed Wing Cert. Plan FAA Approved

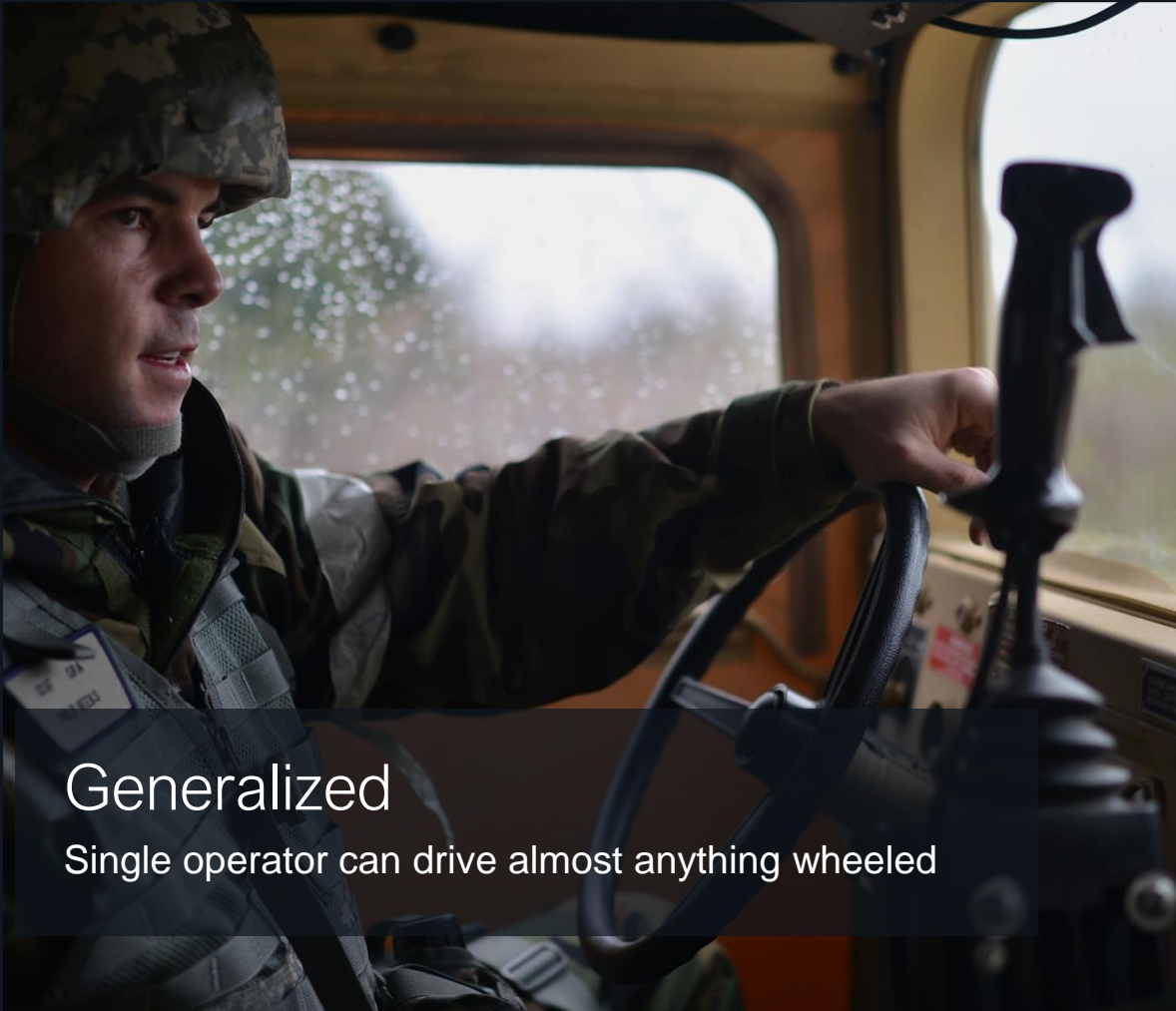
Prototyping

Certification

Product Development

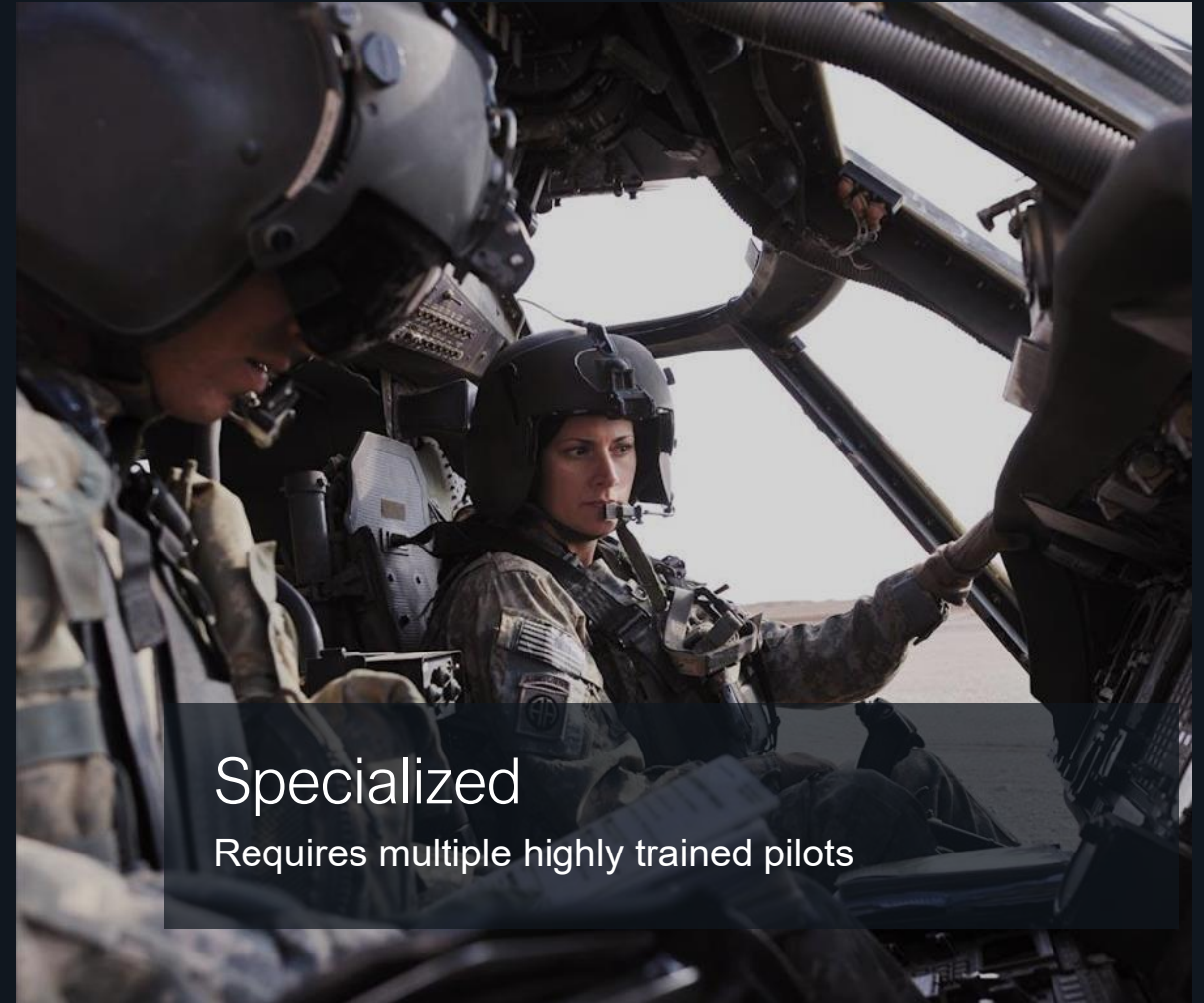


# Skyrise makes flying almost as easy as driving



## Generalized

Single operator can drive almost anything wheeled



## Specialized

Requires multiple highly trained pilots

Skyrise Proprietary and/or Confidential

# SkyOS modernizes existing Fly-By-Wire systems by simplifying the entire aviating experience



## Traditional Fly-By-Wire:

- High training costs
- High operating costs
- Pilot pool limited by cost and access



## Simplified Vehicle Operations:

- Low training costs
- Low operating costs
- Unlimited pilot pool



Skyryse Proprietary and/or Confidential

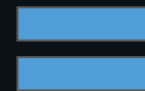


# The equation to unlock air transportation for everyone

Simpler



Safer



Lower Cost



“Everyone is too **focused** on building flying cars instead of making aircraft simpler, safer, and cheaper.”

– Dr. Mark Groden



# Connect with us:



**Howard Kass**

VP - Government and Legal  
Affairs

[howard.kass@skyryse.com](mailto:howard.kass@skyryse.com)

**703-627-0893**



Visit us at  
[Skyryse.com](https://skyryse.com)