MACA
FUTURE IS IN THE AIR

THE FIRST
HYDROGEN-POWERED
FLYING RACING CAR

AIRBUS HELICOPTERS

- 2018 – 2020
- Pre-study
- Pre-development
- First prototype Flight in 2019

MACA FUTURE IS IN THE AIR

- Spin Off founded in 2020
- Demonstrator Scale 1 Production in progress
- First flight scheduled in 2022

Selected out of 250 projects presented to Airbus Innovation committee, the S11 Concept received the support of all major departments at AIRBUS Helicopters

After 3 years of R&D, and the launch of a successful prototype, MACA was incorporated as an independent spinoff in November 2020.

S11 CONCEPT

MACA S11
MAIN CHARACTERISTICS

MACA
FUTURE IS IN THE AIR

THE FIRST SUSTAINABLE
FLYING RACING CAR

☑ 7 METERS LONG - 600 Kg

☑ PILOT ON BORD

☑ HYDROGEN-POWERED

☑ ADVANCED SECUTITY SYSTEM

☑ 85 % RECYCLABLE

SPEED
Up to 250 km/h

SAFETY
Cognitive Technology

SUSTAINABILITY
0% CO2 Emission

S 11 COMPETITIVE EDGE
ADVANCED FEATURES

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LIGHT WEIGHT & AERODYNAMIC

- CARBON /FLAXSEED BASED
- F1 AERODYNAMIC
- WINGS/SPOILERS
- LOW NOISE PROPELLERS

AIRFRAME

HYDROGEN POWERED

- >300 kW
- 6 Electric engines

POWER

SEMI-AUTOMATIC PILOT

- DYNAMIC & COGNITIVE SAFETY
- PREDICTIVE MAINTENANCE
- EASY TO FLY

AVIONICS

CHALLENGES

DOUBLE CHALLENGE

🏆 MOTOR SPORTS ARE LESS POPULAR

▶ Traditional motor sports are not as popular as they used to be (vehicles creating too much pollution)

▶ The next generation of motor sports competition must be spectacular and sustainable

🚗 URBAN MOBILITY MAIN CONCERNS

▶ Road Safety

▶ Traffic Related Air Pollution

▶ Traffic Congestion in Urban Area

▶ Parking Lots Shortages

H2 FLYING CARS

S11 by MACA - THE NEXT GENERATION OF MOTOR SPORTS
HYDROGEN FLYING CARS CHAMPIONSHIP

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TECHNOLOGY IS MATURE ENOUGH FOR HYDROGEN FLYING CARS

"

The Star Wars® Pod races were not just meant to take place in a movie: They will soon become a reality, thanks to **MACA S11**

IMPROVING FLYING CARS TECHNOLOGY
FROM FLYING CAR RACING TO VTOL* MASS ADOPTION & ACCEPTANCE

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1

2

Creating an Innovative and Exciting Flying Car Race Championship with enthusiastic Fan communities...

... In order to drive Social Acceptance of Urban Air Mobility by proving the Safety and Security of Flying Cars

*Vertical Take-Off and Landing

STRATEGIC CHOICE
SPORTS vs GENERAL TRANSPORTATION

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Why are we starting with a FLYING CAR Racing Championship?

MOTOR SPORTS are the Ideal Testing Ground for New Technologies and Processes

When car racing has a breakthrough, it is almost always applicable in some form to mass-produced cars

CERTIFICATION
It is much easier to obtain a certification from aviation authorities when a flying car is limited to a specific arena (vs urban areas)

TESTING
Motor Racing allows to test new technologies under extreme conditions, assessing both quality and performance

FASTER REVENUES
Flying racing cars can be launched on the market through a "Permit to Fly" and will help generate revenues rapidly

SOCIAL ACCEPTANCE
People will get used to see flying cars in competition. This will increase mainstream confidence and acceptance of this new way of transportation

THE MARKET

FLYING CARS GLOBAL MARKET GROWTH
FORTUNE BUSINESS INSIGHTS – REPORT 2021

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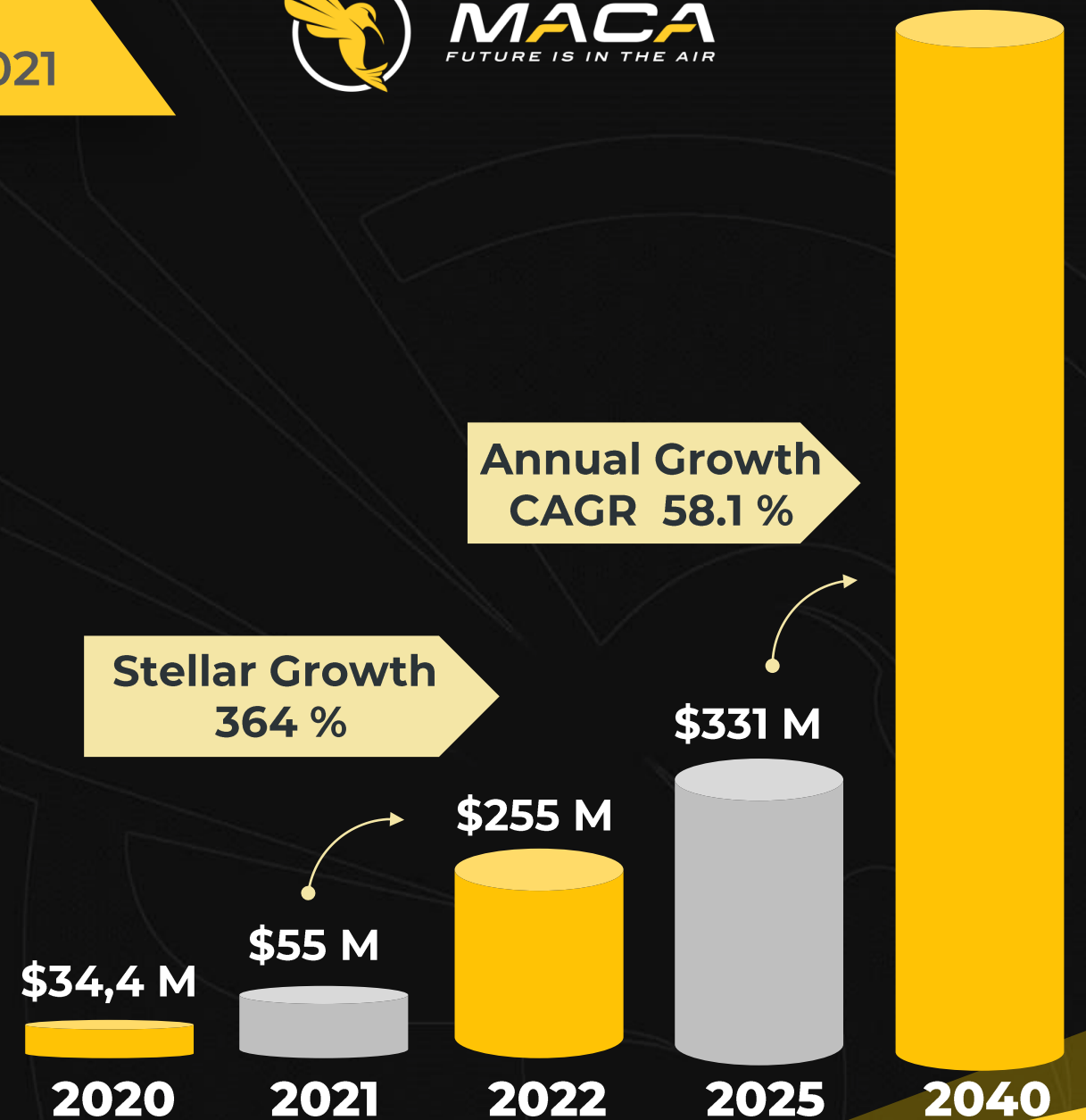**HENRY FORD**
FORBES, 1940

" MARK MY WORDS A COMBINATION AIRPLANE AND MOTORCAR IS COMING. YOU MAY SMILE, BUT IT WILL COME...

$1533,74 B

Annual Growth CAGR 58.1 %

Stellar Growth 364 %

$331 M

$255 M

$55 M

$34,4 M

2020   2021   2022   2025   2040

M = Million

B = Billion [13]

THE TEAM

THE TEAM
TALENT & EXPERTISE

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CHRISTIAN
GENERAL MANAGER

DENISE
CMO

XAVIER
CTO

NICOLAS
Electronic Technologies Expert
- Engineer
- Graduate with high distinction
- 16 years, experience in aerospace

GAUTHIER
Electronic Equipment
- Engineer
- 6 years experience in avionics

LIONEL
AI Expert
- PhD in Artificial Intelligence
- Obstacle Avoidance Studies
- 8 years experience in aircraft manufacturing

ALEXANDRE
Chassis Development
- Aeronautic Engineer – ESTACA
- Founder & CEO of MAD Industries
- Subcontractor

S11 AUGMENTED REALITY EXPERIENCE

1. Flash the QR CODE

2. Select your smartphone OS

3. Slowly Move your phone as requested

4. You should be able to see the S11 Flying Car evolve around you

You can zoom in/out & turn it around you
TAP "AR" to view the Flying Car in the environment
TAP "Object" to visualize the car flying all around you

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