



PERSPECTIVES ON URBAN MOBILITY

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BOTTOM LINE UP FRONT

Intersection of electric propulsion and autonomy will enable successful urban mobility systems in the next decade.



THE NEWMAN CRITERIA

“Until you’re ready to fly a person in it, it is a Toy – When you are ready to fly your family in it.... everyday, it is an aircraft.”

Dan Newman, Boeing Tech Fellow 2017 AHS / AUVSI



A SIKORSKY PERSPECTIVE

Vehicle → Sikorsky Strength

Electric Drive → In Work

Power Storage → Evolving Quickly

Flight Control → Our Focus

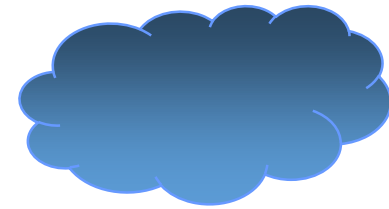
Fleet Optimization → Happening Today

Infrastructure

Airspace Management



Not Us



+



+



+

Infrastructure

=



SIMPLE SAFETY MATH FOR URBAN MOBILITY



Sikorsky S-92®

- ✓ Triplex voting
- ✓ Fail tolerant design
- ✓ Lightning Strike
- ✓ HIRF
- ✓ DAL-A software
- ✓ 2,000+ flight hours per year

Flight critical components designed to “9 9’s” = 1 failure per billion flight hours

Industry leading S-92® integrates to 1 loss per million flight hours.

Potential Future Urban Mobility Fleet:
50,000 aircraft X 3000 FH/Vehicle-Year = 150,000,000 flight hours per year / 1 loss per million flight hours
= 150 accidents per year at current best in class safety standard
Is that acceptable?

OUR CONTROL MATURATION APPROACH

PHASE I: MATURE TECHNOLOGY



Build on FBW Pedigree

PHASE II: CERTIFY AND PROVE



Fly on aircraft where
safety measure is
millions of flight hours

PHASE III



Mature safety
measures to billions of
hours as urban
mobility market grows

YOU ARE LIKELY FALLING INTO 3 CAMPS...

Wow, what a laggard
My Cell phone can solve this problem

No aviation scars

I hope he is not right, we've got this

But No, my kids will not be flying anytime soon

Sikorsky has a rigorous approach

Dan Newman was right

"We pioneer flight solutions that bring people home everywhere.... every time™"

LOCKHEED MARTIN

