nimbus aerospace

Next-gen business aircraft built faster and cheaper

The Problem

There is a need for ~25,000** next generation business aircraft over the next few decades. Current manufacturers can't meet demand, resulting in 2-3 year backlogs.

TIMELINE

Complicated multi-year certification window

MANUFACTURING

Outdated processes hinder innovation

Sources: *Honeywell **Aircraft Performance Group

Our Solution

Meeting demand by utilizing scalable advanced manufacturing and software to deliver a next-gen hybrid-electric aircraft faster, and cheaper.

Program Timeline

10 years - Legacy Aircraft

vs

7 years - Nimbus Aerospace

Program Cost

1B - Legacy Aircraft

vs

700M - Nimbus Aerospace

The Benefits

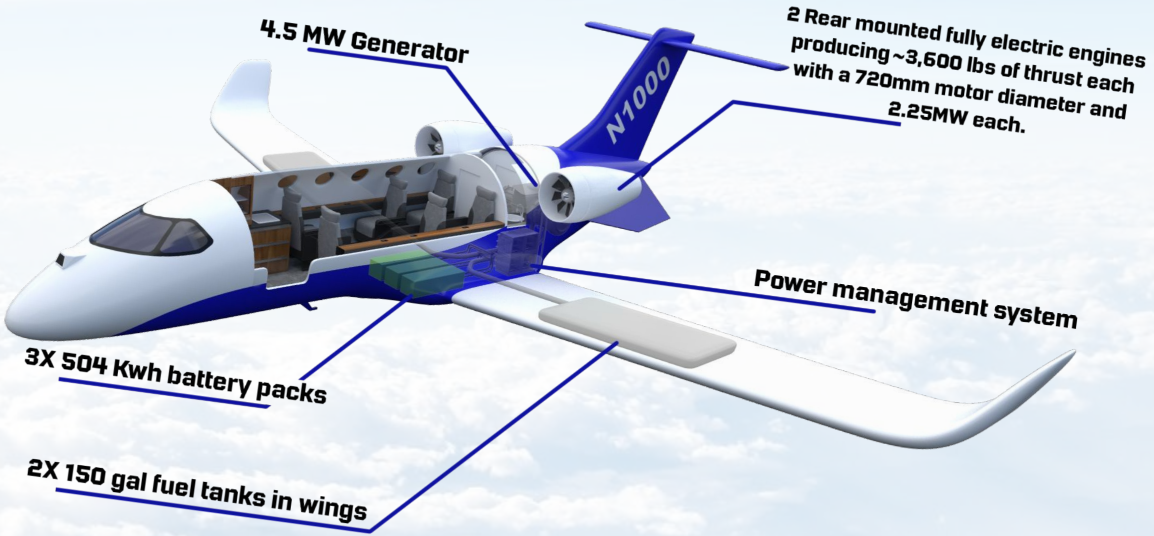
3D printing tools and molds reduces cost by 15%

Certification accounts for ~40% of aircraft program costs. Our multi-agent architecture reduces cert. costs by 30%

Our Product

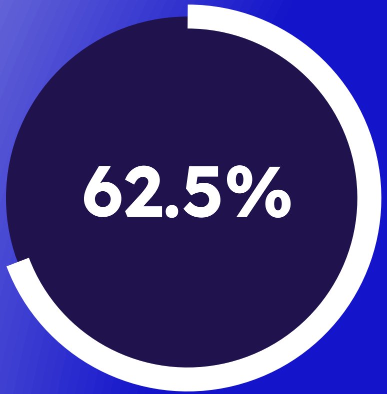
A 6–8 passenger next-gen aircraft that flies up to a 1,500 nm range while burning up to 50% less fuel by using today's batteries (400–500 Wh/kg) with Sustainable Aviation Fuel (SAF) powering fully electric engines.

> ***The number one pain point for light jet owners is fuel cost. People will buy this if you can reduce fuel cost by even 30–40%.***
>
> **Colin Dunne**
> **Sales Director at Jetcraft**
> **Nimbus Advisor**

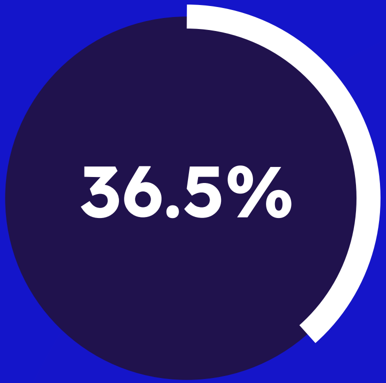


Market Validation

America is the largest private jet market, where we launch, secure FAA certification, and scale globally.



There are 14,632 private jets in the US or ~ 62.5% of the world's fleet*

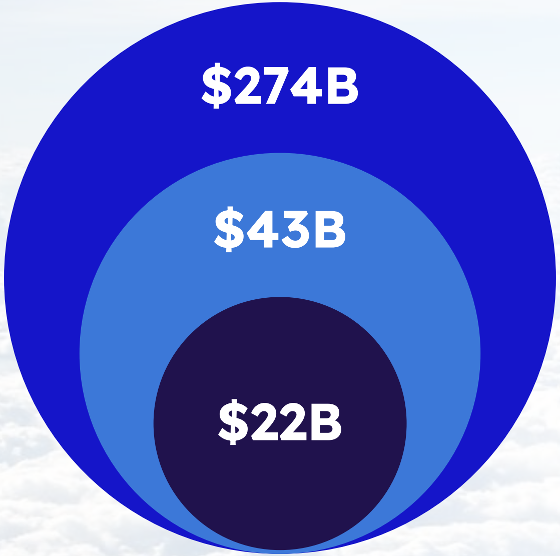


36.5% of the market is made up of light jets like the N1000*

Source: *Airbus Corporate Jets

Market Size

Projected global business jets deliveries are up 15% over the next decade*



$274B - TAM

Estimated 8,500 new business jet sales globally*

$43B - SAM

Estimated 3,740 new light business jet sales globally**

$22B - SOM

Estimated 1,939 new light jet sales in America over***

Sources: *Honeywell **Mordor Intelligence ***Airbus Corporate Jets

Business Model

We generate revenue selling N1000 aircraft to ultra-high-net-worth Americans who fly at least 150 hours per year

N1000 Production

$12M	$289M	$864M
N1000 price	Production ramp starts at 2 planes/month (~23% gross margin) by late 2030	Production settled by year 4 at 6 planes/month (~36% gross margin, 2x the industry standard)

Go to Market Strategy

Less than 1% can afford a private jet, but they own ~48% of global wealth*. **We target: Individuals, Executives, Corporations, Governments, Sport Teams, Charter Operators & Semi Private Airlines**

Referrals → Advertisements → Brand Presence

Professional network, celebrity ambassador program, and jet brokers

Secured Westbrook E1 Racing Sponsorship. Robb Report, F1, sports and other events

Booths in resort towns, air shows, air conventions, and yacht weeks

Sources: *Our World Data

Our Competition

N1000 is the only aircraft able to compete with legacy aircraft while solving the two biggest pain points current light jet owners face: high fuel costs and maintenance costs.

	N1000	TriFan 600	Beyond Aero	Odys VTOL	Legacy Aircraft
Sustainable	✓	✓	✓	✓	
Certification Timeline	✓				✓
Infrastructure Readiness	✓				✓
Low Operating Cost	✓	✓		✓	
Long Range	✓				✓
Fast	✓				✓

Competitive Advantage

The 3 technological pillars we will use to bring N1000 to market 35% faster while costing 30% less

Agentic AI

AI-native certification process that streamlines FAA certification using a multi-agent architecture, reducing time by 24 months.

Additive Manufacturing

3D printing parts and manufacturing tools to reduce costs, time and waste.

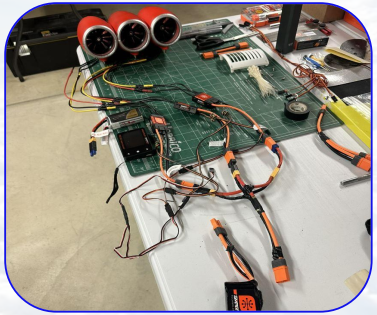
Automation

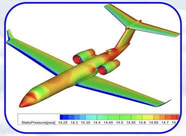
Minimizing human error and waste through next-gen autonomy across safety, manufacturing, tooling, and assembly.

Our Ecosystem

We work with the best in the industry and attract the best

[Nimbus Wing Loading Test]
[Nimbus Main Landing Gear Drop Test]





iCe Innovative Composite Engineering

Composite manufacturing/ supply chain

CUG COMPOSITES UNIVERSAL GROUP

Composite manufacturing/ supply chain

PENDLETON UAS RANGE

Flight testing facilities

FLIGHTHOUSE ENGINEERING

Engineering support

SigmaDesign

Metal manufacturing/ supply chain

WESTBROOK RACING

Partnerships / GTM

HYSKY™

Partnerships / GTM

ADSCFD

Computational fluid dynamics support

Our Roadmap

In two years, we've secured key partnerships, closed our pre-seed, and are set to flight-test our 1/4-scale conforming model

Late 2023 — Launched company and completed initial wind tunnel test

Late 2024 — Techstars and flew 1/10 scale model

Mid 2026 — First flight of 1/4 scale model. Begin FAA certification

Late 2027 — Start full scale aircraft build

Mid 2028 — Finish full scale aircraft assembly

Late 2028 — First flight of full scale aircraft

Late 2030 — Begin customer deliveries

Meet Our Team

We are industry experts backed by Techstars with years of experience in Aerospace engineering, software development, product management and certification.

Bombardier

DASSAULT SYSTEMES

amazon

Microsoft

Federal Aviation Administration

Adrian Groos
Co-Founder & CEO

Akim Niyonzima
Co-Founder & CTO

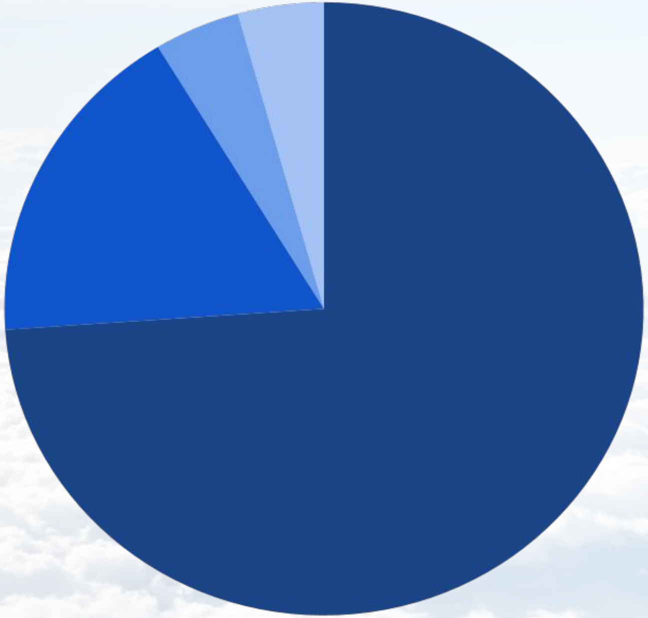
Atul Alatkar
Co-Founder &
Chief AI Officer

Eno Oduok
CMO

Brian Morgan
Chief Engineer
and Advisor

Ask and Use of Capital

$11.5M to finalize full-scale structural design, controls implementation, and transonic wind tunnel testing (secure 15 LoIs valued at $180M)



73.9%
Hardware Engineering

4.3%
Business Operations

17.4%
Software Engineering

4.3%
Misc + Equipment

let’s fl

*Artist rendition

We are headquartered in Seattle, WA, with a team made up of aerospace engineers and industry experts with a mission to decarbonize private air travel while boosting economic growth.

Connect with us:

hi@nimbusaerospace.com | www.nimbusaerospace.com

Appendix

Appendix 1: Agentic AI Cert. Software

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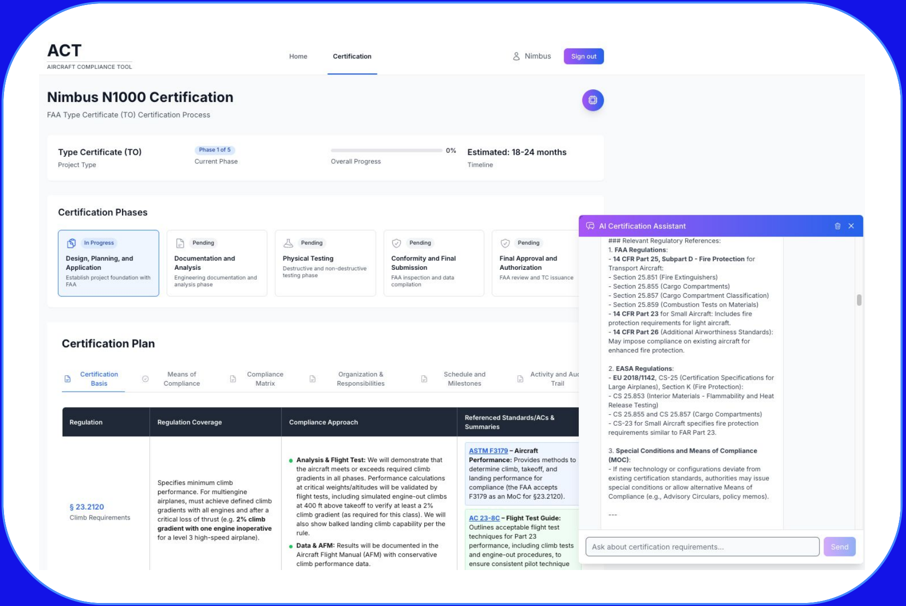
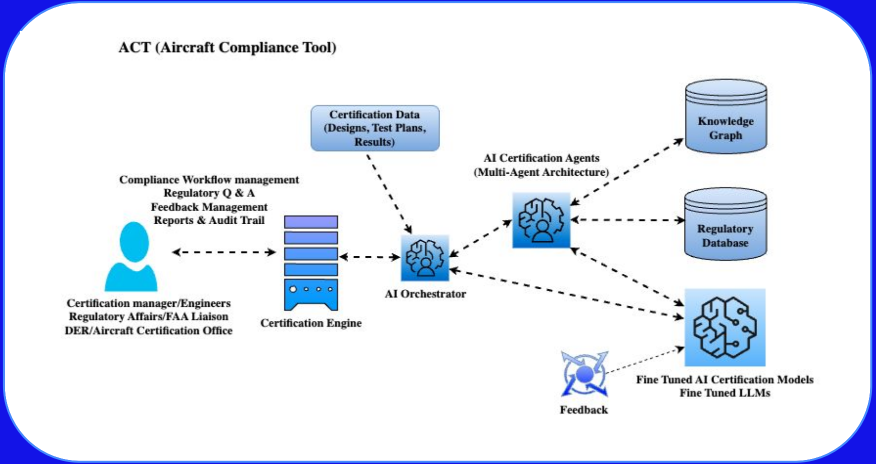
(ACT V1) In-house certification software to reduce costs and speed up certification

1. Certification makes up 40% of development costs on a new aircraft; this reduces that cost by up to 30%

2. This reduces certification time by up to 24 months, depending on the product

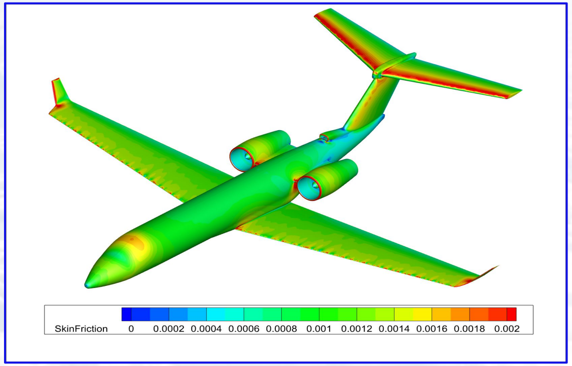
3. This is also sellable to other aerospace companies as an additional source of revenue





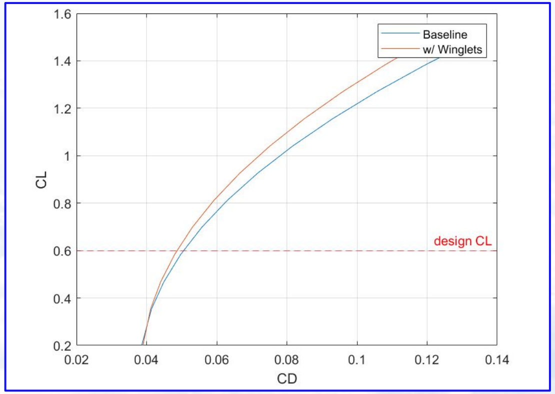
Appendix 2: Aerodynamics

Computational Fluid Dynamics (CFD) is used to aid in aerodynamic optimization. Computer generated simulations allow us to predict aerodynamic phenomena quickly and cheaply.

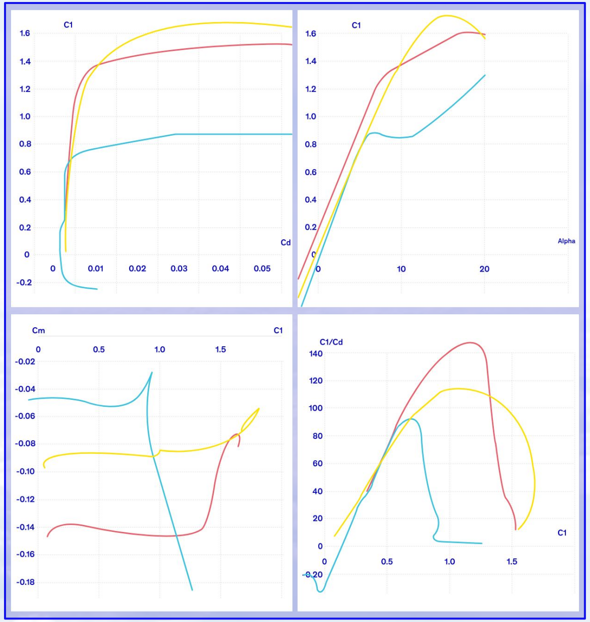


3° Angle of Attack

Airfoil analysis used selected to maximize lift, for a higher performing wing (yellow). This increased lift ~90% for the original design (blue).

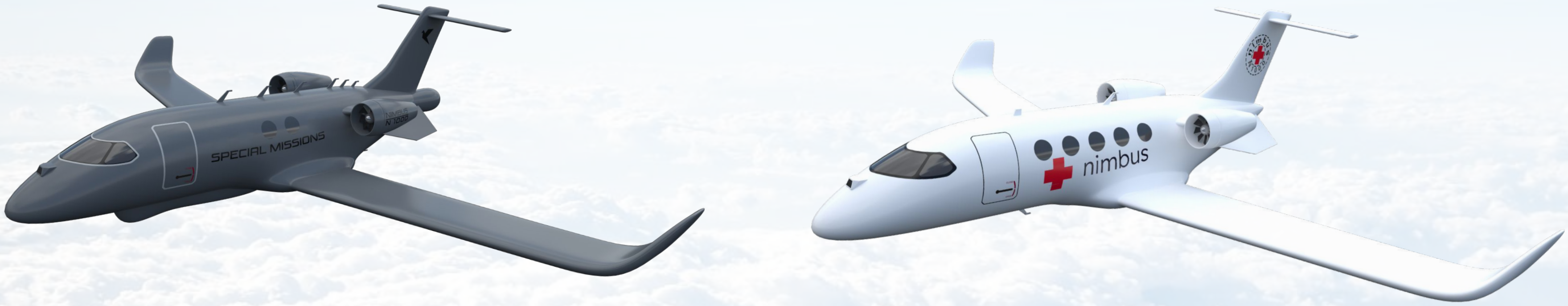


Winglets are added to further decrease drag ~5%.



Appendix 3: Dual-Use Airframe

Hundreds of medevac jets in service are 30–40 years old and need replacement*, while the market for special mission military jets is projected to be ~$30 billion by 2034**



*Artist rendition

Sources: *Bob Gibbs, VP of global sales and strategy for special missions at Textron Aviation ** Global Market Insights Inc.

Appendix 4: 1/10 Sub-Scale Models

In 6 weeks, we built and flight tested 2 models: XSS1 and XSS2 using bespoke and off the shelf parts.

Specs: Both models are: 68.10in long, and 16.40in tall

- XSS1: 8.56lbs | 62.50in wingspan | 617.10 sq.in. wing area | 2x 70mm 6S motors | 1x 6S 6000mAh battery
- XSS2: 14.86lbs | 72.70in wingspan | 832.30 sq.in wing area | 6x 58mm 4S motors | 4 battery packs: 2x 4S 5000mAh 1x 4S 5200mAh 1x 4S 1800 mAh

Conclusions: XSS2 proved that the complexity and added weight from a Distributed Electric Propulsion (DEP) and Fan Over-Wing (FOW) configurations offer no gains or distinct advantages at all

- NSS1 was in the air for ~4 mins and 38 seconds with 30% reserve while NSS2 flew 1 min and 23 seconds with 4% reserves
- No increase in aircraft speed, cargo capacity, or extended range can be had by using or adding any form of DEP system

What's next: Based on the flight tests and Computational Fluid Dynamics (CFD), we will begin to build a high-performance ¼ scale based off of XSS1

N1000 XSS1

N1000 XSS2

Appendix 5: Battery Specifications

N1000 hybrid power plant is partially Amprius batteries. Amprius is a California based company on the cutting edge of battery technology. The cells we use will be manufactured in their super factory in Colorado and are readily available.

amprius

https://amprius.com/

Battery specifications needed:	**3 battery packs**	**Total Voltage: 340 - 480 VDC x 2 motors**	**Energy Capacity: 504 kWh**

Appendix 6: Motor Specifications

We are working with Duxion while also evaluating H3X motors. Duxion is preferred.

DUXION

https://www.duxion.com/

H3X

https://www.h3x.tech/

Motor specifications needed:	**2 Motors**	**Max Capacity: 3,600 lbf per motor x 2 motors**	**Power Input: 4.5 MW**

Appendix 7: N1000 Use Cases

N1000 has range for many nonstop missions

Performance:

Maximum Range:
1,500 nm

Cruise Speed:
398 mph

Max speed:
421 mph

Initial Cruise Altitude:
30,000 ft

Maximum Cruise Altitude:
40,000 ft

Weights:

Maximum Takeoff (MTOW):
22,000 lbs

Empty Weight:
14,000 lbs

Maximum Payload:
2,250 lbs

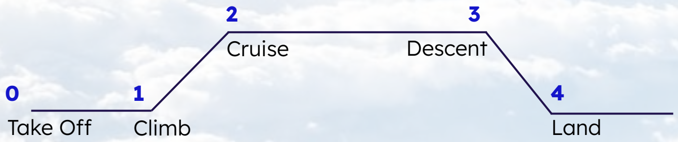
Mission:

Takeoff Distance:
0.89 nm

Climb Distance:
100 nm

Cruise Distance:
1,300 nm

Descent Distance:
100 nm



Appendix 8: Funding Overview

N1000 is a conventional fixed-wing aircraft with a hybrid powertrain. It resembles a Cessna Citation, follows familiar FAA certification paths, and uses pre-certified parts. We don't manufacture the engines, battery, or generator—our providers handle their certification, reducing costs and speeding up certification.

F&F + starter capital: $520K (Mid 2024)
Initial wind tunnel test, completed CAD and computational fluid dynamics, flight tested 1/10 models, and secured 1 LoI valued at 11.5 million

Pre-Seed: $1.6M (Mid 2025)
Build and flight test ¼ scale conforming model, begin FAA certification, and start go-to-market strategy

Seed: ~$12M (Mid 2026)
Finalize full scale structural design, and controls implementation (secure 15 LoIs valued at $180M)

Series A: ~$50M (Mid 2027)
Finalize systems design, and avionics integration (begin working with suppliers) (secure 50 LoIs valued at $600M)

Series B: ~$125M (Mid 2028)
Company building, build full scale prototype, (secure 150 LoIs valued at $1.8B)

Series C: ~$280M (Mid 2029)
Finish prototype testing, and start production facility construction (secure 320 LoIs valued at $3.8B)

Late Stage Capital: ~$200M (Late 2030)

Finish FAA certification, and prepare for production (secure 650 LoIs valued at $7.8B)

Estimated Total: ~$700 Million (including a buffer):
Figure includes $150–$200 million for a production facility construction.
This is our total amount needed, best estimate, but it is subject to change.