

March 17, 2025

Testimony Submitted by: Frank Matus, Director UAS Integration, Thales USA, Inc. & Chair of the North Dakota UAS Council

Reference: Testimony in Support for SB2018 – A BILL for an Act to provide an appropriation for defraying the expenses of the department of commerce; to create and enact a new section to chapter 54-60 of the North Dakota Century Code, relating to department of commerce grant reporting requirements; to amend and reenact section 54-60-31 of the North Dakota Century Code, relating to changing the name of the office of legal immigration to the office of global talent; to provide for a transfer; to provide an exemption; and to provide for a legislative management report

Testimony:

Mr. Chairman and members of the Committee, thank you for the opportunity to testify in support of Senate Bill 2018 which includes funding for the Northern Plains UAS Test Site (NPUASTS) and the State Beyond Visual Line of Sight (BVLOS) System – Vantis.

I want to begin by expressing gratitude to this body for the support and passage of HB1038 which allowed the Vantis team to continue to engage with the Federal Aviation Administration on the implementation of an exclusive one-year pathfinder program to integrate radar data into the State-owned network. This opportunity has not been afforded to any other state and the passage of the appropriation reinforces your commitment to Vantis.

Today, I am requesting that this committee restore the Vantis funding to the amount advocated by both outgoing Governor Burgum and current Governor Armstrong to \$20M in the 2025-2027 biennium at a minimum. The Northern Plains Unmanned Systems Authority Board approved the Test Site's request to submit to Governor Burgum at a level of \$30M at the August 2024 Authority Board Meeting and would request consideration of full restoration based on this and other testimony.

The 2025-2027 Biennium Vantis request includes:

- **Ongoing Operations (Mission Network Operations Center) -- \$13M**
 - Annual labor, facilities costs, software and infrastructure expenditures
- **Maintain, expand and commercialize FAA Radar Data Pathfinder--\$7M**
 - Continued operation of the enclave for 2025-2027 biennium

- **Vantis Expansion--\$3M**
 - Transportable capabilities to expand mission to support agencies for natural disaster, training capabilities and to prepare for national program with Department of Interior
- **Operational Evolution--\$5M**
 - Labor + technology evolution to support FAA and operator enhancements to ensure compliance with federal standards
 - Cyber security evolution – compliance with NIST policy
- **Implementation of Commercial Model to facility ROI - \$2.0M**
 - Promote and sell enclave services to other ex-State entities
 - Establish a “for-profit” entity to facilitate ROI
 - Continued promotion, marketing and expansion of Vantis to other States

Vantis Role in FAA Aviation Modernization

I'd like to pivot and discuss the state of the national airspace system, the role Vantis is playing and why continued, full funding, is critical. The Vantis program continues to be the preeminent model for how unmanned systems can safely operate within the national airspace system today. 2025 has been an historic year for aviation. We have unfortunately seen tragedy with a horrific mid-air collision at the Ronald Reagan National Airport resulting in the loss of 67 Americans, the unfortunate tragedy in Philadelphia, the near miss at Chicago Midway, and, to our north, the Delta Airlines flight that overturned when landing in Toronto. Aviation is still the safest form of transportation but we are reminded that there are improvements that can be made to our system.

Our great State is playing a part in the national conversation. Federal Department of Transportation Secretary Sean Duffy announced on March 11, 2025, that:

*“He’ll ask Congress for potentially **“tens of billions” to create a “brand new” air traffic control system** so that the U.S. can ditch what he called the FAA's “antiquated” technology — and he wants that system in place, he said, within no more than four years.”*

He further went on to say that:

*“I need companies that are gonna move at the speed of Donald Trump...“and those that want to do it ... those are the companies that I wanna hire. And now, may that be Verizon? Maybe. But if I’m looking back, they’re not moving fast enough. **I need companies that are gonna move fast.** And again it’s not gonna be one company — we’re gonna need a lot of companies to buy in and help build out this system.”*

This program that Secretary Duffy is referring to will be **in excess of \$45 Billion.**

And those whom he is referring to **includes the Northern Plains UAS Test Site, the Vantis program and Thales.**

Vantis: The National Model for UAS Integration

Members of the committee, this team is engaged in aviation modernization conversations with the FAA today thanks to the investments this body has made over the last three sessions. We are poised to play a role and be the role model for some of the systems that will inform the evolution of the national airspace system. The Vantis program is not just being referenced—it is being upheld as a standard for air traffic control automation and radar data integration, modernizing and improving the United States National Airspace System. Vantis has many of the capabilities that the FAA is seeking and is the benchmark for modernization.

Now is not the time to back off and wait for the FAA and others to dictate the path forward. We must continue to lead the national dialog, continue to innovate and position Vantis to be deployed to other States and for the FAA to officially endorse it as the standard for all other states to move forward with UAS integration. **To achieve this, continued investment is essential.**

Return on Investment to the State of North Dakota

This legislative session, rightfully so, both chambers have asked about “return on investment.” We have made enormous strides to advance aviation policy and infrastructure in this country. Our investment in Vantis is about to pay dividends.

The Federal aviation infrastructure and airspace system has not evolved since the 1960s! The existing airspace structure was designed with the technological constraints of that era, particularly in radar and radio communication. The last major FAA technology program that went to a national procurement was held in 1983. In aviation, transformative advancements often take decades to implement—and tragically, many changes are only prioritized after disasters. Over the past five years, we have taken **Vantis from a conceptual framework to an established national standard, demonstrating the power of state-led innovation.**

What we have accomplished with Vantis is just shy of a miracle in aviation. Our disciplined approach allowed us to architect Vantis to reflect what the future of aviation in the US, and around the world, will resemble and now we are getting even more attention by the FAA to help move the national model ahead. We have proven that true innovation is being driven at the state level, not by federal agencies, and now we are positioned to reap the benefits of our commitment and strategic patience.

Return on investment covers a multitude of topics including services to the most rural, underserved areas of the State, tools to help our first-responders and economic development tools to attract businesses. Rightfully, the financial ROI is also important but will caution that there is no immediate overnight recouping of a long-term infrastructure investment. We have been looking at several scenarios as the market matures on financial ROI and, based on the inclusion and commercialization of radar data and a more accepting FAA to advance national UAS integration policy, we believe that on the conservative side, we could see a range between \$100M-\$290M over a 10 year period. This does not include infrastructure such as radars. This is all Vantis digital services and represents addressable market.

	Base Case	Nominal Case	Aggressive Case
	Currently Engaged States who are active pursuits	+ Likely Fast Followers (but not competing states)	+ Other likely Followers
States Included in Scenario	AL, MI, MN, MT, ND, OK, SD & TN	Base Case + FL, IL, KS, LA, MD, NC, OR, TX, UT, VA & WY	Nominal Case + AR, CA, CO, GA, MA, NJ, NY, OH & PA
Population	34,428,283 (10.4% of US)	138,853,848 (41.9% of US)	259,211,525 (78.2% of US)
GDP (\$M)	1,892,483 (8.9% of US)	8,223,596 (38.6% of US)	17,013,787 (79.8% of US)
Land Area	600,966 sq. mi. (16.7% of US)	1,484,737 sq. mi. (41.3% of US)	2,009,415 sq. mi. (55.8% of US)
Portion of Population Served by Year 3, 6 & 9	17..2% / 30.6% / 34.9%	9.2% / 19.3% / 29.5%	5.6% / 11.5% / 17.3%
Market Penetration	~ 3.6% of Total US	~ 12.3% of Total US	~ 13.5% of Total US
Cumulative 10 Year Digital Service Revenue	\$100M	\$224M	\$290M

Today’s century code requires a return of revenue to the State on components that were developed using program dollars to be returned to the general fund (5-10% of software license fees is what the current model entails). The Department of Commerce and Thales continue to work towards a mutually beneficial business model that will help the state maximize that return via a to be negotiated commercial model. In addition to asking for support for Vantis, I encourage this legislature to support the changes to century code allowing the North Dakota Development Fund to establish commercial ventures with industry partners to expedite returns on investments.

State Expansion

Today, Vantis is not only expanding across North Dakota, but is also expanding to Northern Michigan, supporting the Michigan National Guard and other commercial operators to bring services to rural communities. We will begin operations there this May and will continue through 2025 with options that will extend the contract through 2029. This was our model in North Dakota, Michigan is our first partner outside of the State. The State of Tennessee will be deploying Vantis over the next year. Other States, including Oklahoma, Louisiana, Alabama, Kansas and Illinois, all have public procurements modeled after what

we have done in North Dakota. Senator Ted Cruz is championing a deployment of new aviation technology in North Texas – Vantis is part of that conversation and as we continue to lead with UAS Integration, **we will be part of the solution that will drive evolution across the country.**

Summary:

I'll end by expressing my sincerest gratitude to this legislative body for continued support for Vantis. This program brought me and my family to this state and it has been life changing for us. What we are doing here for UAS integration isn't happening anywhere else in the world. We are part of generational change that is about to take place with the FAA and our Federal government. It will impact aviation around the world. I ask that you consider our role in the national conversation and urge you to ensure we maintain that leadership role well into the future. Thank you and I will stand for questions.