



Space Florida Board of Directors Meeting Agenda

August 19, 2021
9:00 a.m. – 11:00 p.m.

Call-in Number: 866-528-2256 Guest Code: 4875556 #	Hyatt Regency Orlando International Airport 9300 Jeff Fuqua Boulevard Orlando, FL 32827
Agenda Items	
Call to Order and Pledge of Allegiance	Lt. Gov. Nuñez
Roll Call	Elizabeth Loving
Welcome & Introductions	Lt. Gov. Nuñez
Public Comments	Lt. Gov. Nuñez
Board of Directors	
Board Committees	
1. APPROVAL OF MINUTES <ul style="list-style-type: none">April 22, 2021June 18, 2021	Lt. Gov. Nuñez
2. COMMITTEE REPORTS <ul style="list-style-type: none">➤ Audit & Accountability Committee<ul style="list-style-type: none">March 31, 2021 Interim Financials➤ Governance and Compensation Committee➤ Investment Committee➤ Marketing Committee	Denise Swanson Howard Haug Jay Beyrouti Sonya Deen
3. BUSINESS BEFORE THE BOARD <ul style="list-style-type: none">• Project Davinci• Project Rising Tide• Project Thunderbird• Project Ironwood• 2022 FDOT Five Year Master Plan Amendment• 2022 FDOT Program Management, Planning & Engineering• USDOT INFRAgrant• Project Tiberius• Titan Aviation Fuels• Department of Economic Opportunity	Frank DiBello and Howard Haug
4. PRESIDENT’S REPORT <ul style="list-style-type: none">• Presidential Brief• Business Unit Reports (Ron Lau and Todd Romberger)• Guest Presentation (Janet Petro, Director NASA Kennedy Space Center)• Recent Activities (Included with Advanced Materials: Recent Press Activities; Space Florida Congressional Testimony and National Space Club Speech)	Frank DiBello
Closing Remarks / Adjournment	Lt. Gov. Nuñez

April 22, 2021



Minutes of a Regular Meeting of the Space Florida Board of Directors

A Regular meeting of the Space Florida Board of Directors was held on April 22, 2021 at the Double Tree Hotel in Tallahassee, FL.

BOARD MEMBERS PRESENT:

Lieutenant Governor & Space Florida Chair, Jeanette Nuñez
Jay Beyrouti
Dean Cannon
Sonya Deen
Barbara Essenwine
Mori Hosseini
Ken Kahn
Cody Khan
Scott Ross
Katherine San Pedro

SPACE FLORIDA SENIOR MANAGEMENT PRESENT:

Frank DiBello
Howard Haug
Ron Lau
Todd Romberger
Denise Swanson

WELCOME & INTRODUCTIONS:

A quorum being present, Lieutenant Governor Jeanette Nuñez, called the meeting to order at 1:54 p.m. (EST), and welcomed Board members. The Lieutenant Governor welcomed two new Board Directors: Cody Khan and Scott Ross. She thanked outgoing members; Belinda Keiser and Greg Celestan.

The Lieutenant Governor outlined the new committee assignments as follows:

AUDIT COMMITTEE:	Kenneth Kahn (Chair), Cody Khan, Scott Ross
GOVERNANCE COMMITTEE:	Jesse Biter (Chair), Barbara Essenwine, Mori Hosseini
INVESTMENT COMMITTEE:	Jay Beyrouti (Chair), Dean Cannon, Cody Kahn, Mori Hosseini
MARKETING COMMITTEE:	Sonya Dean (Chair), Jesse Biter, Katherine San Pedro

There were no Public Comments.

1. APPROVAL OF MINUTES:

- *Jay Beyrouti made a motion to approve the minutes for January 14, 2021 Board of Directors meeting, which was seconded by Katherine San Pedro and approved unanimously.*
- *Mori Hosseini made a motion to approve the minutes for March 17, 2021 Board of Directors meeting, which was seconded by Jay Beyrouti and approved unanimously.*



2. COMMITTEE REPORTS:

Audit and Accountability Committee Report – Was presented by Denise Swanson with a review and recommendation for approval of the December 30, 2020 Interim Financials.

- *Katherine San Pedro made a motion to approve the issuance of Space Florida's quarterly interim financial statements for the period ended December 30, 2020 which was seconded by Cody Khan and approved unanimously.*

Governance & Compensation Committee Report - Was presented by Howard Haug. The committee met on March 23, 2021. The committee reviewed and discussed the timeline for the performance review process for the two officers that report to the Board of Directors: The President & CEO and the Executive Vice President, Treasurer & Chief Investment Officer. The committee also had a discussion on a pending policy from management on Securities Trading. The policy's fundamental principles are: (1) Compliance with Laws and (2) Avoidance of Conflict of Interest.

Investment Committee Report - Was presented by Jay Beyrouti and included the March 25, 2021 Investment Committee activities consisting of the review, discussion, and recommendations for the business before the board items to be presented at the April 22, 2021 Board meeting. The committee also reviewed the pending policy from management on Securities Trading.

Marketing Committee Report - Was presented by Emma Newsham and included the April 13, 2021, Marketing Committee activities consisting of the review and discussion of:

- Inbound & Outbound Marketing Activities
- Compliance with Web Content Accessibility Guidelines
- Space Florida Digital Ad Campaign with Site Selector Newsletter
- Space Florida's participation in the July 2021 Space-Comm Expo in the United Kingdom with Enterprise Florida

3. BUSINESS BEFORE THE BOARD ITEMS:

Contracts, Business Development and Project Activities provided to the board in advance were briefed by Howard Haug and Frank DiBello. The following items were recommended for approval:

1. **Project Kraken**: Management requests authority for approval of Resolution #21-34 regarding reimbursement of various costs and expenditures in conjunction with Project Kraken activities.

Mori Hosseini made a motion for approval of Resolution #21-34 regarding Project Kraken as described. The motion was seconded by Cody Khan and approved unanimously.

2. **Project Rising Tide**: Management requests authority for the following activities in conjunction with Project Rising Tide:

Item A: Ratification of the Project Rising Tide Term Sheet from a Total Investment of Twenty-



Six Million Five Hundred Thousand Dollars (\$26,500,000) to Thirty-Five Million Dollars (\$35,000,000) in conjunction with the executed Term Sheet and project related activities.

Item B: Approval to negotiate and enter agreement for participation in the company's Series A fundraising with an equity investment in the amount of One Million Five Hundred Thousand Dollars (\$1,500,000) from 2021 Finance Funding, subject to completion of due diligence.

Jay Beyrouti made a motion to authorize Space Florida Management to ratify the Term Sheet with Project Rising Tide and approval to negotiate and enter an agreement for participation in the company's Series A fundraising with an equity investment amount of One Million Five Hundred Thousand Dollars (\$1,500,000). The motion was seconded by Katherine San Pedro and approved unanimously.

3. **Project Tentmaker:** Management requests authority for approval to negotiate and enter conduit financing/synthetic lease agreements for the construction and lease of a proposed 55,000 square foot facility. The facility will be built on land owned by the company. The company has been awarded a grant from Triumph Gulf Coast for Six Million Seven Hundred Eighty Thousand Dollars (\$6,780,000) to be used in the development of this project. The total project costs will not exceed Twenty-Three Million Dollars (\$23,000,000), the design and construction of the facility is anticipated to be Eighteen Million Dollars (\$18,000,000) and the cost of equipment purchased and leased to the company is anticipated to be Five Million Dollars (\$5,000,000). Approval for authority to negotiate and enter the following is requested:

Item A: Conduit financing and related agreements in the amount of up to Twenty-Three Million Dollars (\$23,000,000) for design, construction, and equipment acquisition.

Item B: Synthetic lease, sublease, and side agreements in conjunction with the project related efforts.

Cody Khan made a motion to authorize Space Florida to complete negotiations and enter the project agreements regarding Project Tentmaker as described. The motion was seconded by Mori Hosseini and approved unanimously.

4. **Project Poseidon:** Management requests authority for the following activities in conjunction with Project Poseidon:

Item A: Approval to update the January 14, 2021 Board Approval regarding Project Poseidon Term Sheet activities from a Total Investment of One Hundred Twenty Million Dollars (\$120,000,000) to One Hundred Sixty Million Dollars (\$160,000,000).

Item B: Approval of Resolution #21-35 regarding reimbursement of various costs and expenditures in conjunction with Project Poseidon.

Mori Hosseini made a motion for approval to update the Term Sheet for Project Poseidon from a Total Investment of One Hundred Twenty Million Dollars (\$120,000,000) to One Hundred Sixty Million Dollars (\$160,000,000)



and approval of Resolution #21-35 as described. The motion was seconded by Cody Khan and approved unanimously.

5. **Holland & Knight:** Management requests authorization for approval to continue engagement of legal counsel professional services with Holland & Knight pertaining to Space Florida's exempt facility bond financing activities in conjunction with U.S.C. 142 in the amount of up to One Hundred Twenty Thousand Dollars (\$120,000) from Fiscal Year 2021 Finance Funding.

After a brief discussion, Cody Khan made a motion to authorize Space Florida to continue services with Holland & Knight in the amount of up to One Hundred Twenty Thousand Dollars (\$120,000) from Fiscal Year 2021 Finance Funding. The motion was seconded by Katherine San Pedro and approved unanimously.

6. **NASA-KSC Aircraft Landing Fees Contract:** Management requests authority for approval to negotiate and enter agreement with NASA KSC for NASA flight operational use of the Launch and Landing Facility. Under the Agreement NASA will pay annual landing fees plus other fees for use of additional facilities or services at market rates for a Four (4) year term.

Jay Beyrouti made a motion to authorize Space Florida to negotiate and enter agreements with NASA KSC for NASA flight operational use of the Launch and Landing Facility. The motion was seconded by Mori Hosseini and approved unanimously.

7. **Fuel Services Agreement with the Defense Logistics Agency (DLA):** Management requests authority for approval to complete negotiations and enter an agreement with the United States Department of Defense's Defense Logistics Agency (DLA). DLA will pay a fee to Space Florida for the provision of aviation fuel and related services to the Department of Defense and Federal Government at Space Florida's Launch and Landing Facility over a Four (4) year term.

After a brief discussion, Katherine San Pedro made a motion to authorize Space Florida to complete negotiations and enter agreement with the United States Department of Defense's Defense Logistics Agency (DLA) as described. The motion was seconded by Cody Khan and approved unanimously.

8. **Florida City Gas Franchise Agreement:** Management requests authority for approval to negotiate and enter a Franchise Agreement with Florida City Gas for natural-gas service covering the Cape Canaveral Spaceport, as defined in Florida Statutes 331.304. This agreement is pursuant to the policy relating to franchise fees approved at the August 21, 2017 Board of Directors meeting. Space Florida has legislative authority to execute these types of agreements under Section 331.316, Florida Statutes, which permits Space Florida to impose rates, fees, and other charges to recover the costs of furnishing facilities and services within the Spaceport.

Mori Hosseini made a motion to authorize Space Florida to negotiate and enter a Franchise Agreement with Florida City Gas for natural-gas service covering the Cape Canaveral Spaceport as described. The motion was seconded by Jay Beyrouti and approved unanimously.



4. PRESIDENT'S REPORT:

Frank DiBello shared the President's Report which included a review of recent activities including:

- Welcome to new Board Directors Cody Khan and Scott Ross
- Tribute to Jim Kuzma
- Organizational Realignment
- Business Unit Reports:
 - Todd Romberger – Spaceport Business Unit
 - Ron Lau – Corporate Development and Capital Programs
- Upcoming Board Activities

Frank thanked the Board for the approval of action items and reminded the Board of the upcoming events.

CLOSING REMARKS & ADJOURNMENT

Lieutenant Governor Jeanette Nunez requested any further questions or comments from the public or board members. There being none, the Chair thanked the Board for the discussion and involvement and adjourned the meeting at 3:22 p.m. (EST)

Lieutenant Governor Jeanette Nuñez, Chair

BOARD OF DIRECTORS MEETING

April 22, 2021

I, Frank DiBello, the undersigned President of Space Florida, do certify and declare that the attached is an accurate copy of the Minutes as approved by the Board of Directors of Space Florida in accordance with the Space Florida Governance Policies, and recorded in the minutes of the meeting of the Board of Directors held on April 22, 2021, and not subsequently amended or modified.

Frank A. DiBello, President

June 18, 2021



Minutes of a Special Meeting of the Space Florida Board of Directors

A special meeting of the Space Florida Board of Directors was held on June 18, 2021 via teleconference.

BOARD MEMBERS PRESENT:

Lieutenant Governor & Space Florida Chair, Jeanette Nuñez
Jay Beyrouti
Barbara Essenwine
Mori Hosseini
Cody Khan
Scott Ross
Katherine San Pedro

SPACE FLORIDA SENIOR MANAGEMENT PRESENT:

Frank DiBello
Howard Haug
Denise Swanson
Ron Lau
Todd Romberger

WELCOME & INTRODUCTIONS:

A quorum being present, Lieutenant Governor Jeanette Nuñez, called the meeting to order at 4:05 p.m. (ET), and welcomed Board members.

There were no Public Comments.

1. BUSINESS BEFORE THE BOARD ITEMS:

The Business Development and Project Activities were provided to the board in advance. Howard Haug and Frank DiBello briefed the Board on the following item for approval:

- **Florida-Israel Innovation Partnership 2021 Awardees:** Management requests authority for management to proceed with the award agreements for the following:
 - a. **CRAIG TECHNOLOGIES AEROSPACE SOLUTIONS, INC.**, of Merritt Island, FL and their Israeli partner, **MTI Wireless Edge** - Two Hundred Fifty Thousand Dollars (\$250,000).
 - b. **EVERIX, INC.**, Orlando, FL, and Israeli partner, **SOLCOLD** - Two Hundred Thousand Dollars (\$200,000).
 - c. **REDWIRE SPACE, INC.**, of Jacksonville, FL and **StemRad, Ltd.**, Israel. - Two Hundred Fifty Thousand (\$250,000).
 - d. **LIGHTPATH TECHNOLOGIES, INC.**, Orlando, Florida, with their Israeli partner – **RP Optical Lab**. - Three Hundred Thousand Dollars (\$300,000).

Mori Hosseini made a motion to authorize Space Florida Management to proceed with the awards as described. The motion was seconded by Jay Beyrouti and approved unanimously.



Frank thanked the Board for the approval of the action item and reminded the Board of the upcoming in-person Board retreat and meeting in Orlando on August 18 & 19, 2021.

CLOSING REMARKS & ADJOURNMENT

Lieutenant Governor Jeanette Nunez requested any further questions or comments from the public or board members. There being none, the Chair thanked the Board for the discussion and involvement and adjourned the meeting at 4:19 p.m. (ET).

Lieutenant Governor Jeanette Nuñez, Chair

BOARD OF DIRECTORS MEETING

June 18, 2021

I, Frank DiBello, the undersigned President of Space Florida, do certify and declare that the attached is an accurate copy of the Minutes as approved by the Board of Directors of Space Florida in accordance with the Space Florida Governance Policies, and recorded in the minutes of the meeting of the Board of Directors held on June 18, 2021, and not subsequently amended or modified.

Frank A. DiBello, President

- **March 31, 2021 Interim Financials**

SPACE FLORIDA



Total Compiled Statement of Revenues and Expenses
Period Ending March 31, 2021
Unaudited
In 000's

	Total budget	Q1 Actual	Q2 Actual	Committed	Total Actual and Commitments	Budget Remaining
Operations Revenues						
State Appropriated Revenue - OPS	\$ 11,500	\$ 2,875	\$ 2,875	\$ 5,750	\$ 11,500	\$ -
Other Revenue	\$ 2,740	\$ 796	\$ 1,200	\$ 1,231	\$ 3,227	\$ (487)
Total Operations Revenues	\$ 14,240	\$ 3,671	\$ 4,075	\$ 6,981	\$ 14,727	\$ (487)
Operations Expenses						
Salaries & Other Related Costs	\$ 7,203	\$ 1,300	\$ 1,485	\$ 3,153	\$ 5,938	\$ 1,265
Contract & Subcontract Services	\$ 1,181	\$ 208	\$ 194	\$ 665	\$ 1,067	\$ 114
Utilities & Maintenance	\$ 3,564	\$ 854	\$ 777	\$ 1,691	\$ 3,322	\$ 243
Travel & Entertainment	\$ 293	\$ 11	\$ 16	\$ 48	\$ 75	\$ 217
Business Recruitment/Investment	\$ 361	\$ 115	\$ 17	\$ 67	\$ 199	\$ 162
Operating, General & Administrative	\$ 1,639	\$ 361	\$ 248	\$ 390	\$ 999	\$ 639
Total Operations Expenses (Excluding Depreciation)	\$ 14,240	\$ 2,850	\$ 2,736	\$ 6,013	\$ 11,600	\$ 2,640
Change in Net Assets Due to Operations	\$ 0	\$ 822	\$ 1,338	\$ 967	\$ 3,127	

3. BUSINESS BEFORE THE BOARD



Space Florida Board of Directors Meeting

August 19, 2021

Contracts, Business Development and Project Activities

(Florida Statutes: 331.305; 331.3051; 331.310; 331.312; 331.316; 331.321; 331.323; 331.324; 331.331; 331.360 and 331.371)

1. **Project Davinci:** Management requests authority for approval to negotiate and enter the following activities in conjunction with Project Davinci:

Item A: Approval to enter the Term Sheet in conjunction with a debt financing structure consisting of facilities, equipment and tooling in Milton, FL, in the amount of up to Forty Million Dollars (\$40,000,000). The Company expects to create approximately fifty (50) new jobs by end of calendar year 2025 with annual estimated wages in the amount of up to Eighty Thousand Dollars (\$80,000), plus benefits, at the new Facilities with the potential to build upon and increase the number of jobs in future years.

Item B: Approval of the attached Resolution #21-36 regarding reimbursement from financing proceeds of various costs and expenditures in conjunction with Project Davinci.

2. **Project Rising Tide:** Management requests authority for approval to negotiate and amend the Term Sheet regarding Project Rising Tide in conjunction with a conduit debt financing structure consisting of facilities, equipment and tooling in the amount of up to Eighty-Nine Million Dollars (\$89,000,000) as well as eligibility evaluation of Spaceport Improvement Program Florida Department of Transportation (FDOT) Matching Grant Funds. The company now anticipates the creation of at least four hundred (400) jobs by 2025 with estimated annual wages in the amount of up to One Hundred Ten Thousand Dollars (\$110,000), plus benefits. The amendment will also include an update regarding Space Florida's equity investment participation in the Company's Series A fundraising in the amount of One Million Five Hundred Thousand Dollars (\$1,500,000) previously expected to close in Fiscal Year 2021, now anticipated to close in Fiscal Year 2022, to be funded by financing appropriations.
3. **Project Thunderbird:** Management requests authority for approval to negotiate and enter into the Term Sheet Agreement with Project Thunderbird in conjunction with a conduit debt financing structure consisting of facilities, equipment and tooling in the amount of up to Six Hundred Thirty-Six Million Dollars (\$636,000,000). The company anticipates the creation of over one thousand nine hundred (1,900) jobs by 2025 with estimated annual wages in the amount of up to Ninety-Eight Thousand Dollars (\$98,000.00), plus benefits.



4. **Project Ironwood:** Management requests authority for approval to negotiate and enter the Term Sheet in conjunction with a conduit debt structure consisting of facilities, equipment and tooling in the amount of up to Twenty-Five Million Dollars (\$25,000,000). The company anticipates the creation of seventy-five (75) new jobs by 2023 in addition to fifty (50) retained jobs with estimated annual wages of Seventy-Five Thousand Dollars (\$75,000), plus benefits.

5. **2022 FDOT Five Year Master Plan Amendment:** Management requests authority for approval to amend the 2017 Space Florida Cape Canaveral Spaceport Master Plan to include Fiscal Year 2022 recommend projects to meet commercial, national and state space transportation needs in accordance with Florida Statutes Chapter 331.360 and the Space Florida Space Transportation Improvement Program Funding Summary attached hereto.

6. **2022 FDOT Program Management, Planning and Engineering:** Management requests authority for approval to negotiate and enter contract activities with FDOT in the amount of up to Four Million Three Hundred Dollars (\$4,000,300) in conjunction with Fiscal Year 2022 Spaceport Program, Management Planning and Engineering Funding.

7. **United States Department of Transportation (USDOT) INFRAgrant:**
Management requests authority for following activities in conjunction with INFRAgrant related activities:

Item A: Approval to negotiate and enter Memorandum of Agreement (MOA) with FDOT to establish the roles, responsibilities, funding and procedures between FDOT and Space Florida for: (a) the construction of a bridge replacement and demolition of the existing Indian River Bridge; (b) improvements to Space Commerce Way and NASA Parkway West, both within the John F. Kennedy Space Center (KSC); and (c) the administration of the federal grant assistance supporting the Cape Canaveral Spaceport Indian River Bridge Replacement & Space Commerce Way Connector INFRAgrant.

Item B: Approval of the attached Resolution #21-37: rescinding and superseding Resolution #30 previously approved and entered into on March 4, 2019; ratifying the INFRAgrant Term Sheet entered into January 25, 2021 between the USDOT, FDOT, Space Florida and the National Aeronautics and Space Administration; and the MOA between FDOT and Space Florida referenced in Item A above.

8. **Project Tiberius:** Management requests authority for approval to negotiate and enter contract activities with R-Squared Solutions, LLC., in the not to exceed contract value of One Hundred Seventy-Seven Thousand Dollars (\$177,000) in conjunction with continuing Space Force related consulting services.



9. **Titan Aviation Fuels:** Management requests approval for authority to negotiate and enter contract activities with Titan Aviation Fuels in the amount of up to Six Hundred Thousand Dollars (\$600,000) in conjunction with Launch and Landing Facility (LLF) Commercial Aviation Fuel Supply Services. Space Florida purchases fuel on a continual basis to replenish fuel sold at the LLF and has issued an Intent to Award for RFP-SF-01-0-2021 for a one-year agreement plus three successive option periods for the provision of commercial fueling operations to include the purchase of Jet-A-Aviation Fuels, leasing of two mobile 5,000 gallon refueling vehicles and related services.

10. **Department of Economic Opportunity:** Management requests approval for authority to negotiate and enter contract activities with the Department of Economic Opportunity in conjunction with Space Florida's performance and program funding agreements for the period of July 1, 2021 through June 30, 2022 in conjunction with Specific Space Florida Appropriations 2253 and 2254 for Fiscal year 2022 as following:

Item A: Space Florida Operations	\$11,500,000
Item B: Space Florida State of Israel Collaborative Efforts	\$1,000,000
Item C: Space Florida Aerospace Industry Financing, Business Development and Infrastructure needs	\$6,000,000

RESOLUTION
of the
Space Florida Board of Directors
regarding
Reimbursement of Expenditures
for
PROJECT DAVINCI

WHEREAS, Pursuant to Part II of Chapter 331 of the Florida Statutes, Space Florida is charged with promoting aerospace business development by, among other things, facilitating business financing and spaceport operations; and

WHEREAS, at its July 16, 2020 Board Meeting, the Space Florida Board of Directors authorized management to enter a conduit-debt financing structure relative to Project Davinci; and

WHEREAS, Project Davinci (the “Project”) will consist of construction of new infrastructure and facilities and the acquisition of equipment and tooling necessary to maintain critical aerospace systems for the United States Department of Defense (“U.S. DoD”); and

WHEREAS, Space Florida and the Project operator have incurred and/or will incur various costs associated with the upgrade of existing infrastructure, the construction of new infrastructure and facilities, the acquisition of equipment and tooling, and the debt financing of all or some of the foregoing; and

WHEREAS, the Board of Directors of Space Florida has determined it is in the best interests of Space Florida and the Project operator to reimburse such costs from proceeds of tax-exempt or taxable debt; and

WHEREAS, the United States Department of Treasury has issued various regulations regarding reimbursement of governmental costs through the issuance of tax-exempt debt.

NOW THEREFORE, BE IT RESOLVED BY THE BOARD OF DIRECTORS OF SPACE FLORIDA, AS FOLLOWS:

SECTION 1. PURPOSE. It is the intent of the Space Florida Board of Directors that various Project costs and expenditures related to Space Florida’s construction of new infrastructure and facilities and the acquisition of equipment and tooling necessary to maintain critical U.S. DoD aerospace systems, together with engineering, legal, financing, and other related costs, all in connection with the Project, will be reimbursed from the proceeds of the debt financing anticipated by Space Florida for the Project. In support of the Project, Space Florida

and the Project operator have paid for, and/or reasonably anticipate that Space Florida and the Project operator will pay for, such costs and expenditures associated with the Project from existing funds of one or both parties. It is reasonably expected that reimbursement of such costs and expenditures shall come from the issuance of tax-exempt or taxable debt, with an issuance not to exceed Forty Million Dollars (\$40,000,000) in aggregate principal amount of debt to fund the Project. It is the intention of Space Florida to secure such debt primarily by a pledge of and lien upon the revenues received by Space Florida from the Project. The expenditures to be reimbursed shall be consistent with Space Florida's budgetary and financial policy as being the type of expenditures which shall be paid on a long-term basis.

SECTION 2. APPLICABLE LAW. Space Florida shall comply with all applicable law in regard to the public availability of records of official acts by public entities, including making this Resolution available for public inspection.

SECTION 3. COMPLIANCE. It is the intent of Space Florida that the purpose of this Resolution is to meet the requirements of Treasury Regulations Section 1.150-2 and to be a declaration of official intent under such Section.

SECTION 4. SEVERABILITY. In the event that any portion or section of this Resolution is determined to be invalid, illegal, or unconstitutional by a court of competent jurisdiction, such decision shall in no manner affect the remaining portions or sections of this Resolution, all of which shall remain in full force and effect.

SECTION 5. EFFECTIVE DATE. This Resolution shall take effect immediately upon its adoption.

RESOLVED this 19th day of August, 2021.

SPACE FLORIDA
By its Board of Directors

By: _____
HONORABLE JEANETTE NUNEZ,
Lieutenant Governor of Florida
Chair of the Board

ATTEST:

Title: _____

Space Transportation Improvement Program Funding Summary

2017 Cape Canaveral Spaceport Master Plan Amendment 5 (July 2021)

Table 6.1 Recommended Projects

	2012 - 2021			2022	2022-2026		2027
	PAST			PRESENT	FUTURE		
MASTER PLAN STRATEGIC OBJECTIVES	HISTORICAL FDOT FUNDING (10 YEARS)			AVAILABLE FDOT FUNDING (1 YEAR)	FDOT PROGRAMMED (5 YEARS)	PLANNED SPACEPORT DEVELOPMENT (5 YEARS)	PROPOSED 5TH YEAR PLANNED (1 YEAR)
Vertical Launch Improvements**	FY12	\$5,000,000	LC-46 Space Florida Improvements	\$16,622,002 Vertical Launch Projects Launch Complex Upgrades LC-20 Improvements LC-36 Orbital Launch	\$74,153,949	\$379,080,000	\$38,000,000
	FY13	\$5,000,000	LC-39A SpaceX Launch Complex Upgrades & Modernization				
	FY15	\$6,150,000	LC-41 ULA Crew Tower / White Room				
	FY16, 17, 18	\$43,000,000	LC-36 Blue Origin Launch Site Construction				
	FY17	\$5,000,000	LC-39A SpaceX Crew Access Arm & Tower Upgrades				
	FY18	\$5,000,000	LC-40 SpaceX Launch Complex Upgrades				
	FY19 & 20	\$10,000,000	LC-41 ULA Launch Complex Upgrades				
	FY19 & 21	\$6,100,000	LC-20 Firefly Launch Complex Improvements				
	FY20 & 21	\$22,000,000	LC-39A SpaceX Next Gen Launch Infrastructure				
	Subtotal	\$107,250,000					
Processing & Range Improvements**	FY 12	\$5,000,000	LC-40 SpaceX Payload Integration & Encapsulation	\$23,000,000 Processing & Range Projects Spacecraft Manufacturing Facilities Spacecraft Processing Facilities Spaceflight Training & Processing Facility	\$60,528,868	\$567,090,000	\$57,000,000
	FY 12	\$5,000,000	Commercial & Crew Processing Facility Boeing				
	FY 13, 14, 15	\$15,000,000	Orbital Processing Facility Boeing				
	FY 13 & 14	\$9,000,000	X-37 Processing Facility Boeing				
	FY 14	\$700,000	Ex Park Blue Origin Medium/Heavy Lift Assembly				
	FY 14 & 15	\$1,850,000	MX Spacecraft Propulsion and Test Operations Facility				
	FY 16	\$10,000,000	Ex Park Blue Origin Manufacturing Facility				
	FY 17 & 19	\$17,500,000	Ex Park AOS Satellite Manufacturing Facility				
	FY 19	\$6,500,000	SpaceX Processing & Operations Center				
	FY 19	\$4,400,000	Ex Park Blue Rocket Test & Refurbishment Complex				
	FY 19	\$9,000,000	Ex Park FireFly Aerospace Manufacturing Facility				
	FY 20 & 21	\$21,500,000	Ex Park Blue Heavy Lift Orbital Launch Facilities				
	Subtotal	\$105,450,000					
Horizontal Launch & Landing Improvements**	FY 19 & 21	\$2,325,000	Cecil Space Ops Command Center, PPF & Hangar Doors	\$3,500,000 Horizontal Launch Projects Rocket Motor Test Facility Horizontal Launch Utility Infrastructure	\$59,510,643	\$37,470,000	\$4,000,000
	Subtotal	\$2,325,000					
Common Use Infrastructure Improvements***	FY17	\$2,750,000	Space Commerce Way, NASA Parkway, Central Control Road	\$24,900,000 Common Use Infrastructure SLF Development Commodity Distribution Infrastructure LC-20 North & South Pads Area 57 West Facilities Wastewater Capacity Improvements	\$84,928,267	\$942,725,000	\$94,000,000
	FY18 & 19	\$10,000,000	CCAFS Electrical Capacity: New Glenn Substation & Transmission				
	FY18 & 19	\$3,500,000	LC-46 Lightning Protection System & Complex Upgrades				
	FY19	\$1,000,000	SLF Power & Comm Improvements for Launch Operations				
	FY19	\$10,000,000	Helium Pipeline				
	FY19	\$37,800,000	SLF East Area Development				
	FY19	\$8,000,000	Roberts Road Corridor Development				
	FY20	\$500,000	SLSL Commercial Power Connector				
	FY20	\$5,800,000	CCS Power Phase 1: Underground Power Lines				
	FY20	\$2,000,000	ICBM Road Launch Complex Utilities				
	FY21	\$14,500,000	CCS Power Phase 2: Saturn Substation & Distribution				
	FY21	\$4,000,000	SLF Airfield Improvements				
	Subtotal	\$99,850,000					
TOTALS	\$ 314,875,000			\$ 68,022,002	\$ 279,121,727	\$ 1,926,365,000	\$ 193,000,000

*Multi-year project extending to next FY. **Assumes 50% match *** Assumes no match for State Common Use Infrastructure
Upcoming FY funding forecast to project types is based on known projects on the horizon.

RESOLUTION #21-37

RESOLUTION

of the
SPACE FLORIDA BOARD OF DIRECTORS
regarding the
**Indian River Bridge and Space Commerce Way
Projects**

WHEREAS, a material part of the mission assigned by the legislature of Florida to Space Florida is to “preserve the unique national role served by the Cape Canaveral Air Force Station [n/k/a Cape Canaveral Space Force Station] and the John F. Kennedy Space Center;” and

WHEREAS, in pursuit of that part of its mission, Space Florida applied for and was awarded by the United States Department of Transportation (“USDOT”) a grant under its Infrastructure for Rebuilding America (“INFRA”) Program in the amount of Ninety Million Dollars (\$90,000,000); and

WHEREAS, the purpose of the INFRA grant is to provide a major part of the funding for the following projects to preserve and enhance the premier role of the John F. Kennedy Space Center in aerospace industry and exploration:

1. Replacement of the existing Indian River Bridge; and
2. Widening and improvement of Space Commerce Way; and
3. Resurfacing and rehabilitation of NASA Parkway West; and
4. Installation of an Intelligent Transportation System; and
5. Adoption of the infrastructure of NASA Causeway, Indian River Bridge (located on Tract 4042 E-1), NASA Parkway W (from the eastern border of NASA Tract 4042 E-1 to the intersection of Space Commerce Way (SCW)), SCW, and Kennedy Parkway South (from the SCW intersection south to State Road 3) into Florida’s State Highway System (SHS) after the Florida Department of Transportation (FDOT) receives permanent non-transferable easements from NASA; and
6. State of Florida funding of future maintenance costs for the above SHS infrastructure; and

WHEREAS, the Space Florida Board of Directors approved its Resolution #30 on March 4, 2019, in connection with the INFRA grant; and

WHEREAS, FDOT has now joined Space Florida as a co-Project Sponsor for the INFRA grant and the related projects; and

WHEREAS, Space Florida has executed that certain “Term Sheet Under the Fiscal Year 2019 INFRA Grant Program: FHWA Projects” among USDOT, FDOT, Space Florida, and the National Aeronautics and Space Administration; and

WHEREAS, Space Florida and FDOT have negotiated their Memorandum of Agreement under which, among other things, the two agencies have allocated their respective duties and rights in connection with the INFRA grant projects and have approved allocation of funds from the state's Spaceport Improvement Program, when needed, for the match of federal funding required under the INFRA Grant Term Sheet.

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF DIRECTORS OF SPACE FLORIDA:

Section 1. Term Sheet Ratified. The execution and delivery of the Term Sheet by officers of Space Florida is ratified, validated, and confirmed.

Section 2. Memorandum of Agreement. The President, the Executive Vice President and Treasurer, and the Chief Financial Officer of Space Florida are authorized and directed to execute and deliver the Memorandum of Agreement with FDOT.

Section 3. Delegation of Authority. The officers and staff of Space Florida are authorized and directed to undertake all other actions necessary or useful to carry out and complete the INFRA grant projects, including entering into related design, construction, and other contracts. During the administration of the INFRA grant and its related contracts, the officers and staff of Space Florida shall report to this Board of Directors from time to time the status of the projects, their funding, their schedule and progress, and other material project matters.

Section 4. Previous Resolution. Resolution #30 of the Board of Directors is rescinded and is superseded in its entirety by this Resolution #21-37.

APPROVED THIS 19th DAY OF AUGUST, 2021.

SPACE FLORIDA

By: Its Board of Directors

By: _____

Hon. Jeanette Nuñez
Lieutenant Governor of Florida
and Chair of the Board of Directors

ATTEST:

By: _____

Frank DiBello
President and Chief Executive Officer

Press Activities



**Space Florida, Sierra Nevada Corporation Announce Use Agreement for Launch and Landing Facility
*Dream Chaser® Spaceplane to Land at Cape Canaveral Spaceport***

Cape Canaveral Spaceport, Fla. (May 4, 2021) – Today, Space Florida announced it has entered into a Use Agreement for Sierra Nevada Corporation's (SNC) use of Space Florida's Launch and Landing Facility (LLF) for reentries of SNC's Dream Chaser® spaceplane in support of NASA's Commercial Resupply Services (CRS)-2 contract. The agreement will make LLF the first landing site for Dream Chaser® when it returns from its first NASA mission in late 2022.

The Use Agreement provides SNC use of the runway, support facilities and other services during testing and landing to ensure a safe and successful return of Dream Chaser® and its cargo from the International Space Station (ISS).

Under the CRS-2 contract, Dream Chaser will transport cargo to the ISS and land at the LLF. Dream Chaser® will launch on United Launch Alliance's (ULA) Vulcan Centaur launch vehicle and can deliver more than 5,400 kilograms of cargo to the ISS. Landings will occur under Space Florida's FAA Reentry Site Operator License (RSOL) and SNC's eventual FAA Reentry Operator License (ROL). The Use Agreement makes SNC the first commercial user of Space Florida's RSOL. This activity expands the Cape Canaveral Spaceport's capability to support commercial space companies at the world's premier spaceport.

In addition to the runway, SNC will also use Space Florida's Reusable Launch Vehicle Hangar, Convoy Vehicle Enclosure, also known as the T-Shelter, and midfield area for pre- and post-landing operations. The runway and these facilities will also be used for a pathfinder test and other test events prior to reentry.

"Space Florida is pleased to announce this partnership with Sierra Nevada Corporation for the return of Dream Chaser® to the Launch and Landing Facility," said Space Florida President and CEO Frank DiBello. "We look forward to the new capabilities and commercial activity that this use agreement will bring to both the Cape as well as the State of Florida."

"This is a monumental step for both Dream Chaser® and the future of space travel," said Fatih Ozmen, SNC's CEO and owner. "To have a commercial vehicle return from the International Space Station to a runway landing for the first time since NASA's space shuttle program ended a decade ago will be a truly historic achievement."

"We're excited to formally recognize the Launch and Landing Facility as a designated return site for the rapid recovery of International Space Station cargo," said Bob Cabana, Kennedy Space Center director. "With its first mission, planned for 2022, Sierra Nevada's Dream Chaser will add an amazing capability to increase the robustness of sustaining the station with supplies, hardware, and experiments for the foreseeable future. It will be a tremendous and visible next step in the commercialization of low Earth orbit as NASA looks toward a sustained human presence in space beyond our home planet."

Dream Chaser® has the potential to land at any FAA licensed landing site that has a suitable 10,000-foot runway capable of handling a typical commercial jet. In January, Space Florida announced the issuance of its RSOL from the FAA Office of Commercial Space Transportation, making the LLF for first commercial licensed reentry site.

Space Florida and SNC worked closely on the FAA application for the RSOL. The application process included demonstrating through analysis that a reentry vehicle could land at the site while maintaining public safety. The license allows the Cape Canaveral Spaceport to support Dream Chaser® reentries as well as other orbital reentry vehicles.

Watch today's announcement: <https://bit.ly/2Rm1F7q>

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About Space Florida: Space Florida was created to strengthen Florida's position as the global leader in aerospace research, investment, exploration and commerce. As Florida's aerospace and spaceport development authority, we are committed to attracting and expanding the next generation of space industry businesses. With its highly trained workforce, proven infrastructure and unparalleled record of achievement, Florida is the ideal location for aerospace businesses to thrive – and Space Florida is the perfect partner to help them succeed. www.spaceflorida.gov

About Cape Canaveral Spaceport: The Cape Canaveral Spaceport, at which Space Florida has an operational spaceport authority role, is the premiere transportation hub for global space commerce. Space Florida oversees management and operation of key elements of Florida's existing space transportation capability including the Launch and Landing Facility and Space Launch Complex 46. Those Cape Canaveral Spaceport capabilities are enabled by safe and secure operations across a broad landscape of space activities.

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FOR IMMEDIATE RELEASE:

**Space Florida, Florida Venture Forum Announce Winners of
2021 Aerospace Innovation and Tech Forum**

Miles Space, Inc., is Grand Prize Winner of Space Florida's Accelerating Innovation Cash Prize

Exploration Park, Miami and Tampa, Fla. (June 10, 2021) – Space Florida and the Florida Venture Forum, Florida's largest statewide support organization for investors and entrepreneurs, are pleased to announce Miles Space, Inc., ecoSPEARS, Doroni LLC and OptiPulse, Inc., as the winners of the all-virtual 2021 Aerospace Innovation and Tech Forum. Today's event, the sixth annual aerospace-focused conference hosted in partnership with the Florida Venture Forum, featured a competition of 20 presenting companies

A panel of judges reviewed each selected company's presentation and supporting materials. Grand Prize Winner Miles Space will receive \$40,000 of Space Florida's Accelerating Innovation (AI) Award, while 1st Runner-Up ecoSPEARS will receive \$30,000 and joint Second Place winners Doroni LLC and OptiPulse, Inc., will each receive \$15,000.

Miles Space, Inc., Tampa (www.miles-space.com/), is an Aerospace company that specializes in Signal Processing for Military Passive Radar, SatComs, Drone Detection technology, and our Water Vapor-Based thruster for satellites and space probes.

ecoSPEARS, Altamonte Springs (www.ecospears.com/), the company has developed green solutions to eliminate toxins from the environment, so everyone has access to clean water, clean food, and clean air. ecoSPEARS is a cleantech company that obtained an exclusive license to NASA-developed environmental cleanup technologies that can permanently eliminate the world's most persistent and toxic environmental contaminants from impacted sediment, soil, and groundwater, forever, displacing the need to dredge, landfill and incinerate contaminated media.

Doroni LLC., Parkland (www.doroni.io/#home), since 2016, their multi-disciplinary team has been leveraging cutting-edge technologies to develop a revolutionary new eVTOL (electric vertical takeoff and landing) platform with semi-autonomous capability that any adult can operate, called the Doroni flying car.

OptiPulse Inc., Albuquerque, New Mexico (www.optipulse.com), the company has developed a communications link which could be described as a wireless extension cord for fiber installations. This link uses a new type of wireless NIR photonics chip that has tested at 25Gbps in simple OOK.

"As Florida's aerospace industry continues to grow and thrive, it is encouraging to see the capital venture ecosystem community continue to support those companies that play a key role in the State's success in aerospace," said Space Florida President and CEO Frank DiBello. "Space Florida congratulates Miles Space, ecoSPEARS, Doroni and OptiPulse as the winners of today's Aerospace Innovation and Tech Forum, and we thank our partners at the Florida Venture Forum for their leadership in the capital formation arena "

“Connecting companies with capital sources and shining a spotlight on Florida innovation are at the core of the Forum’s mission,” said Kevin Burgoyne, President and CEO of the Florida Venture Forum. “We are so grateful to our members and partners at Space Florida for their leadership and support of one of our state’s most dynamic and important industries. The record attendance and participation in today’s event are great signs that Florida is open for business, and that our work together is making a difference. Congratulations to our winners, and to all our presenters.”

The 20 presenting companies were selected from a pool of more than 84+ applicants by a committee of active Florida venture capital investors. Space Florida provided the Accelerating Innovation prize money totaling \$100,000. To date, Space Florida supported capital accelerators have attracted more than \$585 million in funding and investments for the participating companies

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About Florida Venture Forum: The Florida Venture Forum is Florida’s largest statewide support organization for investors and entrepreneurs, helping emerging Florida companies connect with sources of capital from across the country. The organization provides programs statewide throughout the year in addition to hosting the Florida Venture Capital Conference, the Statewide Collegiate Business Plan Competition and the Early Stage Capital Conference. www.flventure.org.

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Space Florida Breaks Ground on Launch and Landing Facility Utility Corridor
Construction Brings Commercial Utilities to Leasable Property

Cape Canaveral Spaceport, Fla. (July 1, 2021) – Space Florida is pleased to announce the start of the first phase of development at the Launch and Landing Facility (LLF), marking the next big step in attracting industry to Florida’s Cape Canaveral Spaceport, which includes elements of NASA’s Kennedy Space Center and the Cape Canaveral Space Force Station. The more than one-mile-long utility corridor project will provide power, water and communications service to large portions of property adjacent to the LLF, opening up development opportunities for companies wishing to join the Cape’s growing commercial space ecosystem. The LLF joins the Cecil Spaceport and Space Coast Regional Air and Spaceport as part of Florida’s Spaceport System to serve increasing commercial and government aerospace missions.

With the utility corridor in works, Space Florida’s LLF is a prime location for future development for commercial aerospace customers. With over 400 acres of both air and land-side developable property in the first phase, potential uses include aircraft or spacecraft operational hangars, office space, passenger training and operations facilities; aerospace manufacturing, processing and assembly facilities; and propellant and fueling facilities.

At 15,000 feet long and 300 feet wide, the LLF is one of the longest and most capable runways in the world. Strategically located in the heart of Florida’s aerospace ecosystem at the Cape Canaveral Spaceport, the LLF is located away from populated areas and provides access to restricted airspace. Other features of the LLF include the air traffic control tower; navigational and landing aids; and fire and emergency response services.

“Construction of the utility corridor is the next step in attracting commercial aerospace to the Cape Canaveral Spaceport,” said Space Florida President and CEO Frank DiBello. “With the land within Space Florida’s Exploration Park nearing capacity and market demand accelerating, development at the Launch and Landing Facility ensures Florida’s leadership in space commerce and exploration will continue, bringing new capabilities and customers to the busiest spaceport in the world. We look forward to the future activity at the Launch and Landing Facility.”

“The Florida Department of Transportation congratulates Space Florida and its partners as they begin the construction of the spaceport Launch and Landing Facility utility corridor,” said FDOT Secretary Kevin J. Thibault, P.E. “This is another critical investment as Florida leads the way in commercial space development creating statewide economic opportunities for generations to come.”

Florida designates space as an official mode of transportation, and Space Florida works closely with Florida Department of Transportation on the Spaceport Improvement Program to make critical investments in Florida infrastructure to accelerate the growth of the aerospace industry in Florida. Space Florida is in active dialog with multiple companies exploring near term capacity development at the LLF.

In 2015, NASA formally transferred the operations and maintenance of the former Shuttle Landing Facility to Space Florida, opening up new commercial capacity for the LLF. In 2018, Space Florida secured a Launch Site Operators license for the facility from the Federal Aviation Administration. In recent months, Space Florida received the Reentry Site Operators License from the Federal Aviation Administration.

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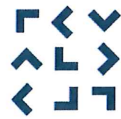
About Space Florida: Space Florida was created to strengthen Florida's position as the global leader in aerospace research, investment, exploration and commerce. As Florida's aerospace and spaceport development authority, we are committed to attracting and expanding the next generation of space industry businesses. With its highly trained workforce, proven infrastructure and unparalleled record of achievement, Florida is the ideal location for aerospace businesses to thrive – and Space Florida is the perfect partner to help them succeed. www.spaceflorida.gov

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SPACE FLORIDA



רשות החדשנות
Israel Innovation
Authority

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**Space Florida, Israel Innovation Authority Announce Eighth-Round Winners of Innovation
Partner Funding**

Exploration Park, Fla., and Jerusalem, Israel (July 12, 2021) – Space Florida, the aerospace and spaceport development authority for the State of Florida, and the Israel Innovation Authority, an independent, publicly-funded agency created to address the needs of the local and international innovation ecosystems, are pleased to announce the eighth-round winners of industrial research and development funding tied to the Space Florida-Israel Innovation Partnership Program.

In October 2013, Florida and Israel established a \$2 million recurring joint fund to support research, development, and commercialization of aerospace and technology projects that benefit both Israel and Florida. For this [Call for Projects](#), 20 joint proposals were submitted by teams of for-profit companies in Florida and Israel. Four teams have been selected for this eighth round of awards.

“Congratulations to the winning partnerships in this latest Call for Projects in the Florida-Israel Innovation Partnership,” said Lt. Governor Jeanette Nuñez. “Florida’s space industry is rich in innovation, research and development, and collaborations like the program with Israel help to ensure a bright future in space. I look forward to seeing the results from this year’s winning companies.”

“The partnership between Florida and Israel continues to yield innovative results and contribute to our state’s thriving aerospace industry,” said Space Florida President and CEO Frank DiBello. “Space Florida congratulates the winners of this Eighth Call for Projects, and looks forward to the successes of each company as well as continuing the strong relationship we have with the Israel Innovation Authority in growing research and development within the aerospace sector.”

“Since its inception in 2013, the Israel-Florida collaboration on space related technologies has managed to produce great projects that could truly make a difference in the aerospace sector,” said Ami Appelbaum, Chairman, Israel Innovation Authority. “This year we were excited to note an increase in the number of applications submitted compared to last year, as well as the noteworthy high quality of those projects. We strongly believe that the partnership between Florida and Israel, and the success of this collaboration between companies from both countries will further strengthen the ties between the two countries and economies. We wish much success to the winning teams and companies and look

forward to the amazing changes they will make on our world and beyond."

The winners are as follows:

- **Craig Technologies (Merritt Island, Florida) & MTI Wireless Edge (Israel)** for the development of an innovative antenna that can be used for space-ground and space-space applications. The existing antenna will be electrically adapted for the required satellite communication frequency band and mechanically redesigned to meet the space environmental requirements. The re-engineering of the existing antenna will provide small satellite manufacturers with additional options for competitive suppliers.
- **Everix Optical Filters (Orlando, Florida) & SolCold (Israel)** for innovative nano-particle materials using a dichroic filter to cool down objects using sunlight. With this award, Everix will focus on optimizing the Everix production processes to create the filter-size needed, and Solcold will scale up its cooling particles for the commercialization of SolCold's cooling-by-sunlight products
- **Redwire Space (formerly Made In Space), Jacksonville, Florida) & StemRad (Israel)** for the project focusing on conducting on-orbit additive manufacturing of personal radiation shielding vest components from recycled polyethylene. Redwire Space and StemRad will recycle polyethylene from packaging waste into filament for on-orbit additive manufacturing of polyethylene shielding inserts for StemRad's personal radiation protection vests.
- **LightPath Technologies (Orlando, Florida) & RP Optical Lab (Israel)** will develop and design an Opto-Electronics Thermal Imaging (OETI) module installed on Nano / Micro satellites. The OETI module will be based on a new developed space-qualified broadband, compact, lightweight, modular, cryogenically cooled infrared motorized camera, utilizing IR optical lens substrates, space-compatible broadband telescope lens and video electronics. The joint team's goal will be the successful space environmental qualification of these cameras and their building blocks.

Each company will receive their respective funding awards from Space Florida and the Israel Innovation Authority.

Additionally, Space Florida and the Israel Innovation Authority would like to thank Enterprise Florida's Israel Office for its collaboration and partnership in this Call for Projects.

The next joint call for applications is expected to be released in September 2021. Florida-based companies interested in more information can visit www.spaceflorida.gov, while Israel-based companies can visit www.innovationisrael.org.il.

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About the Israel Innovation Authority: The Israel Innovation Authority, an independent publicly funded agency, was thus created to provide a variety of practical tools and funding platforms aimed at effectively addressing the dynamic and changing needs of the local and international innovation ecosystems. This includes early-stage entrepreneurs, mature companies developing new products or manufacturing processes, academic groups seeking to transfer their ideas to the market, global corporations interested in collaborating with Israeli technology, Israeli companies seeking new markets abroad and traditional factories and plants seeking to incorporate innovative and advanced manufacturing into their businesses.

Space Florida Congressional Testimony

Opening Statement of Frank DiBello
President and CEO, Space Florida
House Committee on Transportation & Infrastructure
Subcommittee on Aviation

Hearing: “Starships and Stripes Forever – An Examination of the FAA’s Role in the Future of Spaceflight”

Wednesday, June 16, 2021

Chairman Larsen, Ranking Member Graves, and distinguished members of the subcommittee, thank you for this invitation. I am honored to share a Florida perspective on a topic of great importance to our nation’s leadership in space transportation.

Space Florida is a public corporation and Independent Special District, established to strengthen Florida’s leadership in aerospace research, investment, exploration, and commerce¹. We actively support the development of space transportation at the Cape Canaveral Spaceport and other spaceport territories around our state.

Florida hosts four of the 12 licensed commercial spaceports², and since 1989, over half of FAA’s licensed launches. Of 31 so far this year, nearly 60% were from privately developed and operated facilities at Cape Canaveral Spaceport³, a territory which includes Cape Canaveral Space Force Station and Kennedy Space Center⁴.

Since January, launches from the Cape have demonstrated a capability of lifting nearly 400 metric tons⁵ of cargo to orbit. Fifty or more launches a year from Florida will become the norm. Future projections far exceed that number⁶.

Years ago, Florida imagined this future and designated space transportation as a distinct element of its Strategic Intermodal System. Space transportation is critical to our economy. Yet, it is an emerging industry. It requires care in allowing new systems entering the market to operate within a flexible regulatory framework. The FAA must develop this flexible framework while challenged with increasing demands on its resources.

With Florida’s launch activity and the busy air traffic corridors along our coast, we urge increased FAA effort in technology development to advance safe and efficient integration of routine space transportation with commercial aviation. Florida is already providing an operational environment where industry working with FAA can identify and mature improvements to existing systems and procedures.

There have been more launches of commercially owned and operated vehicles from the Cape since 2011 than all Space Shuttle launches over its 30 years. Thanks to more than \$1.5 Billion in

¹ Chapter 331, Part II Florida Statutes

² FAA Office of Spaceports

³ FAA Office of Commercial Space Transportation database of licensed launches

⁴ Chapter 331, Sec. 304 (1), Part II Florida Statutes

⁵ 45th Space Launch Delta manifest; commercial launch provider vehicle payload capacity

⁶ 45th Space Launch Delta launch data and forecast

commercial spaceport investment by Florida and its industry partners⁷, we now have a landscape of new and redeveloped launch complexes on sites once used for Government systems.

The National Space Transportation Policy directs federal agencies to provide access to launch ranges, purchase U.S. space transportation services, and refrain from activities that preclude, discourage, or compete with U.S. commercial space transportation⁸. These policies fostered renewal and growth in America's space launch capacity. But vital supporting infrastructure has not kept up at the Cape and other locations.

The U.S. Department of Transportation should embrace space transportation as another modal element critical to the well-being of the nation, including it in our infrastructure investments. We urge Congress to authorize and fund a program aimed at enabling America's space transportation leadership. Such a program should be funded on a recurring basis, prioritize assistance to sites where there is a demonstrated need by operational activity or market demand, and advance the objectives of a national strategy.

In 2018, the FAA chartered an Aviation Rulemaking Committee, or ARC, to provide input on streamlined regulations for commercial space transportation. Space Florida was honored to participate. While our industry continues to evaluate how FAA's revised regulations will affect the Cape's operations, there remains much to be done.

The FAA must adapt and grow its workforce to meet the challenges of this dynamic industry. I want to commend the progress that has been made by Associate Administrator Monteith in reorganizing and staffing to respond to these challenges. We believe FAA should focus on protection of the *uninvolved* public - people and property outside the controlled boundaries of a federal, state, or private launch site. Launch site operators could assume a greater responsibility for regulating the activities of spaceport personnel not directly participating in a licensed activity, allowing greater FAA attention outside the spaceport fence line.

U.S. leadership depends on a regulatory structure that achieves public safety, while remaining flexible to enable new technologies and operational approaches that advance U.S. capabilities. I urge this Committee to ensure that FAA engages with this unique industry early and often, so that the companies most knowledgeable about the risks and technologies involved can help inform development of FAA rules that regulators *and* operators will have to live by.

Thank you again for the opportunity. I look forward to your questions.

⁷ Florida Department of Transportation/Space Florida rollup of 34 major projects funded with over \$312 million from Florida's Spaceport Improvement Program combined with over \$1.26 billion in private contribution from industry participants in the program since July 2011 (FY 2012). Does not include more than \$450 million in Space Florida-facilitated private financing for commercial spaceport investments prior to the end of 2012.

⁸ National Space Transportation Policy, 2013. Accessed through the Department of Commerce

Testimony of Frank DiBello

President and CEO, Space Florida

House Committee on Transportation & Infrastructure

Subcommittee on Aviation

Hearing: “Starships and Stripes Forever – An Examination of the FAA’s Role in the Future of Spaceflight”

Wednesday, June 16, 2021

Chairman Larsen, Ranking Member Graves, and distinguished members of the subcommittee, thank you for the invitation to testify before you today. I am honored to appear alongside my esteemed industry colleagues, to share with you a Florida perspective on this topic of crucial importance to our nation’s leadership in space transportation. I applaud your leadership and willingness to examine a broad range of issues regarding the role of the FAA in regulating and enabling space transportation, and the importance of smart investments by all in growing the U.S. space transportation infrastructure to compete successfully in this global enterprise - an enterprise exceeding \$400 Billion in annual revenues.¹

Background

Space Florida is a public corporation and Independent Special District of the State of Florida, established by an act of the Florida Legislature in 2006 to strengthen Florida’s position as a global leader in aerospace research, investment, exploration, and commerce². To that end, it is the intent of the Legislature that Space Florida serve as the single point of contact for state aerospace-related activities with federal and state agencies, the military, and the private sector.

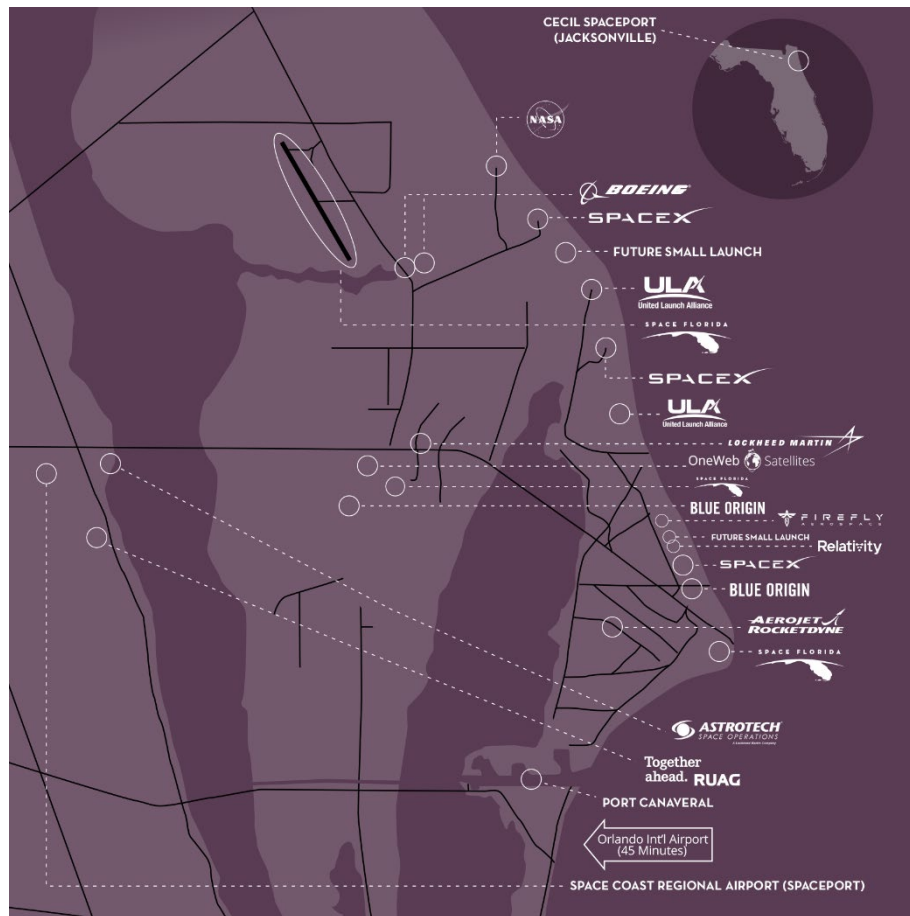
As Florida’s aerospace industry development organization, we are committed to attracting and expanding the next generation of space industry businesses. Our team fosters the growth of a sustainable and world-leading aerospace industry in Florida, and supports the development of the Cape Canaveral Spaceport and other spaceport territories around the state. We accomplish this mission by implementing strategies and utilizing financial and other development tools designed to foster the growth of Florida’s aerospace industry:

- Developing a master plan for growth and development of the Cape Canaveral Spaceport, and a statewide spaceports systems plan to guide development of a network of commercial spaceports and the supporting freight, logistics and supply chain infrastructure around Florida
- Partnering with NASA and the U.S. Space Force to make underutilized federal assets or assets no longer needed for mission purposes at Kennedy Space Center and Cape Canaveral Space Force Station available to commercial customers of the Cape Canaveral Spaceport

¹ The Space Report 2020: The Authoritative Guide to Global Space Activity, Space Foundation

² Chapter 331, Part II Florida Statutes

- Supporting infrastructure development to enable growth of commercial space companies at the Florida spaceports, aided by Florida Department of Transportation's Spaceport Improvement Program infrastructure funding
- Providing appropriate financing structures to enable growth of aerospace companies around Florida by constructing new facilities and acquiring machinery and equipment
- Increasing capital sources available to growing Florida aerospace companies through capital acceleration events conducted with the Florida Venture Forum and other financial institutions



Map of Cape Canaveral Spaceport tenants, with Space Coast Regional Spaceport and Cecil Spaceport inset

Florida's Place in 21st Century Commercial Space Transportation and the FAA's Role

Florida was where the nation entered the global commercial market for space transportation, beginning with the Government's launching of the earliest commercial telecommunications satellites. In 1998, Spaceport Florida's Cape Canaveral Spaceport launch site was used for the first launch from an FAA-licensed, state-operated site.³

³ FAA Office of Commercial Space Transportation database of licensed launches; 2017 Cape Canaveral Spaceport Master Plan

Today, Florida hosts four of the FAA's 12 licensed commercial spaceports⁴ and a corresponding majority of the launch licensing demand on the FAA. Of the licensed U.S. launches thus far this year, nearly 60% lifted off from privately developed and operated facilities at the Cape Canaveral Spaceport⁵, the state's statutory designation of the territory comprised of the Cape Canaveral Space Force Station and the Kennedy Space Center⁶. Since the beginning of the FAA launch licensing program in 1989, Florida has accounted for more than half of this launch activity⁷. Landings are also becoming commonplace, adding to the activity at the spaceport.

It should be apparent then why Florida designated space transportation as a distinct modal element of its statewide Strategic Intermodal System, almost two decades ago. Space transportation is critical to our state and our country's inter-connected networks of air, maritime, and surface transportation. Just over the past six months, launches from the Cape have demonstrated a capability of lifting nearly 400 metric tons⁸ of cargo into space. This may not seem like a lot of freight to the experts who are familiar with the metrics of U.S. seaport shipping, domestic air freight movement, or the volume of cargo hauled across our National Highway System. But this concentration of space launch capacity, all enabled by a growing fleet of commercially owned and operated U.S. launch providers, is unmatched anywhere else on the planet. It offers America a significant advantage as the international competition for economic and military dominance in space accelerates.

The launch cadence has increased dramatically over the last few years, with 20 launches in the last six months and 24 additional launches projected by the end of the year. 50+ launches a year for Florida will become the norm, with future projections far exceeding that number⁹. Yet, this is still an emerging industry, and requires care in allowing new systems entering the market to operate with a flexible regulatory framework. Accordingly, the FAA's challenge in effectively applying this framework and meeting an increasing cadence is placing new demands on its human and technical resources. Further, despite the efforts of the FAA and the other installation owners at the U.S. Eastern Range, not all overlapping and duplicative rule sets have been eliminated. While these streamlining efforts are continuing, as long as duplication and overlap continues, there will be an unnecessary burden on all parties, burden that does nothing to enhance public safety.

With Florida's increasing share of FAA licensing activity, coupled with the heavily-used domestic and international air traffic corridors along our coast, Space Florida urges an increased FAA effort in technology development and deployment to advance the safe and efficient integration of routine space transportation with commercial aviation. Florida is already providing an operational environment where industry working with FAA can identify and mature improvements to existing systems and procedures. We are eager to support further FAA focus in this area.

⁴ FAA Office of Spaceports

⁵ FAA Office of Commercial Space Transportation database of licensed launches

⁶ Chapter 331, Sec. 304(1), Part II Florida Statutes

⁷ FAA Office of Commercial Space Transportation database of licensed launches

⁸ 45th Space Launch Delta manifest; commercial launch provider vehicle payload capacity

⁹ 45th Space Launch Delta launch data and forecast

Commercial Space Transportation Infrastructure: Role of USDOT and the FAA

The final Space Shuttle launch took place 10 years ago this July. In the past decade, there have been more launches of commercially owned and operated launch vehicles than there were Space Shuttle launches during that 30-year program. This commercial success has been enabled by more than \$1.5 Billion in commercial spaceport investment by Florida and its industry partners¹⁰. This investment has produced a landscape of new and redeveloped launch complexes on sites once used for Government systems. It has also brought new manufacturing and support facilities operated by or for the commercial providers and customers.

Cape Canaveral Spaceport has emerged as the world's busiest commercial spaceport. This success validates the wisdom of a national space policy that promotes the participation of state governments to facilitate private sector investment and operation of space transportation infrastructure. States are powerful tools, with unique capabilities not found in federal agencies. To meet the challenge of assuring US leadership in the commercial marketplace, in exploration, and in national security space, this nation must bring all of its capacity to the contest. The metrics of commercial launch activity in Florida highlight the space mission outcomes of that policy: more than two dozen missions to the International Space Station, including the return of U.S. human spaceflight from American soil; hundreds of satellites serving global user markets for telecommunications, navigation, and other services; and new capabilities and services in support of NASA, U.S. Space Force, and international demand for space access.

The 2013 National Space Transportation Policy, which remains in place, directs federal agencies to facilitate access to the launch property on its ranges, purchase and use U.S. commercial space transportation capabilities and services, and refrain from activities that preclude, discourage, or compete with U.S. commercial space transportation activities¹¹.

While these policies have been very successful in renewing America's space launch capacity with commercial capabilities, the common use infrastructure that is vital to connecting these capabilities to the required support infrastructure has not kept up at the Cape and other locations around the country. Much of the property is still owned and operated in large measure by the Government, or by other public entities. The US Government should consider enabling the private partnership redevelopment of infrastructure at individual sites it no longer needs, upkeep of aging road and utility networks, and development of increased commodities and services needed for these commercial providers.

It is time for a strategic and effective infrastructure policy and program to grow the nation's commercial space transportation system. The U.S. Department of Transportation and the FAA should embrace space transportation as another modal element critical to the well-being of the nation's economy by including space transportation in the nation's infrastructure investments.

¹⁰ Florida Department of Transportation/Space Florida rollup of 34 major projects funded with over \$312 million from Florida's Spaceport Improvement Program combined with over \$1.26 billion in private contribution from industry participants in the program since July 2011 (FY 2012). Does not include more than \$450 million in Space Florida-facilitated private financing for commercial spaceport investments prior to the end of 2012.

¹¹ National Space Transportation Policy, 2013. Accessed through the Department of Commerce

Space Florida was a successful applicant for a USDOT \$90 million Infrastructure for Rebuilding America (INFRA) Grant to enable the replacement of NASA's failing 1964 bridge over the Indian River¹², a primary surface transportation route used to transport both freight and people to the entire Cape Canaveral Spaceport. Florida's Department of Transportation and Space Florida are providing the non-federal match for this new asset as well as a connector highway to Space Florida's space commerce park located on NASA property.

We join with many of our colleagues in the commercial space transportation industry – licensed commercial spaceports and operators, including those using their own private sites – in calling on the Congress to authorize and fund an infrastructure program aimed at enabling America's space transportation leadership. We believe such a program should be adequately funded on a recurring annual basis, prioritize grant funding for sites where there is a demonstrated need by operational activity or clear market demand, and advance the objectives of a national strategy. Florida has employed such approaches in its own Spaceport Improvement Program. We would be happy to lend our experience and discuss this further with the Committee if helpful.

In reviewing the GAO report on commercial space transportation infrastructure¹³, we agree with its findings that a broader consideration of approaches and funding sources other than those existing programs initially identified by the FAA is not only appropriate and timely, but necessary for the U.S. to sustain its leadership.

Why FAA's Role in Assuring Public Safety for People and Property Must Be Retooled

Just as we concur with the GAO's findings regarding the FAA's need to find new approaches to enabling infrastructure, we also concur with its findings that the FAA must adapt and grow its workforce to meet the challenges of a dynamic and rapidly expanding space industry. I want to acknowledge the progress that has been made by Associate Administrator Monteith in reorganizing and staffing to respond to these challenges. It is no easy task he has. We know that the successful implementation of new performance-based rules, and the ongoing revolution in emerging space technologies require the right people with the right skills doing the right jobs in the most efficient and effective manner possible.

The Federal Aviation Administration chartered the Streamlined Launch and Reentry Licensing Requirements Aviation Rulemaking Committee (ARC) in 2018 to provide a forum to discuss current and potential future regulations setting forth procedures and requirements for commercial space transportation launch and reentry licensing for the FAA's consideration. The FAA tasked the ARC to develop recommendations for a performance-based regulatory approach in which the regulations state safety objectives to be achieved, and leave design or operational solutions up to the applicant. Space Florida was honored to participate in this activity. Along with the rest of our industry, we are continuing to evaluate how the new Part 450 regulations will affect our ability to increase the operational density (geographic proximity) and intensity (frequency of operational activity) of space transportation operations at the Cape. We are keenly aware that the FAA's

¹² INFRA Grant Award, announced July 25, 2019 by the US Department of Transportation

¹³ Commercial Space Transportation: FAA Should Examine a Range of Options to Support U.S. Launch Infrastructure, GAO report 21-154, released December 22, 2020

elaboration on how spaceports and operators may meet the new regulations through acceptable means of compliance will depend on the content of many Advisory Circulars which still need to be produced.

We continue to believe, as do many of the commercial operators we served on the ARC with, that the FAA should focus its public safety efforts on protection of people and property outside the controlled boundaries of a federal, state, or private launch site and redefine its safety role when it comes to regulating the activities of personnel that are not directly participating in a licensed activity, such as neighboring operators, or others on a space launch facility. That would mean a greater role and responsibility for the site operators to mitigate hazard risks to their employees and vendors.

The competitiveness of the U.S. in the international rivalry for space dominance depends on ensuring a regulatory structure that achieves its focus on public safety, while retaining the flexibility to enable new technologies and operational approaches to advance U.S. space transportation capabilities. Rulemaking is a lengthy process with long-lasting consequences. It is imperative to hear from all involved stakeholders to ensure we can get it right. For all future rulemaking and associated regulatory processes, I urge this Committee to ensure that the FAA engages with this unique industry early and often, so that the companies most knowledgeable about the risks and technologies involved can do their best to help inform the development of the FAA rules that all, regulators as well as operators, will have to live by.

Chairman Larsen, Ranking Member Graves, and members of the subcommittee, thank you again for the opportunity to testify today. I look forward to your questions.

National Space Club Speech

NSC Lunch Presentation 060821

Good afternoon ... and thank you ... for having me back ... again this year ... As I have said so many times before ... this is my favorite venue ... to speak at ... because as a community ... you are the heart ... and energy ... of the space industry in the state! ... And, we ... have come ... through a lot ... together!

It was just about 10 years ago ... that we ... as an anxious community ... watched the last Space Shuttle, Atlantis ... soar into the heavens. ... It was a unique moment ... in the life of this ... very close ... community ... where we all ... watched/an amazing event ... with immense pride ... and yet ... with an overwhelming sense ... of a future uncertain.

The Shuttle program was over! ... and ... Florida's space future ... especially for the Space Coast ... was ominous.

Many of us had been there before ... when the Apollo ... and other federal programs were cancelled ... and the Space Coast was devastated. And now ... it was going to happen again. Already waves of layoffs were rolling through ... and thousands more terminations ... were ready to be processed. When it was done ... over 9,135 direct space jobs were lost ... and perhaps two or three times that number ... of secondary jobs ... were lost in our community.

Across the State of Florida ... unemployment numbers were also soaring ... primarily due ... to a perfect storm that hit us ... through a great recession. On top of that ... one year earlier ...

the Administration had cancelled Project Constellation ... as too far behind schedule ... and way too over budget ... to ... ever be sustainable. (Pause)

But Today, “look” ... at where we are! The contrast is remarkable! and we can all ... be very proud ... of what we have accomplished ... together ... to rebuild ... for a more resilient future ... and one ... where truly amazing things ... are becoming commonplace. And ... there is every reason ... for us to expect ... to be even more dazzled ... in the near future!

(Pause) Today, I’d like to touch on how we got here, but more importantly, where we’re going next!

I won’t dwell on it, ... because so many of us ... have lived this story personally, but it is ... so very important ... to acknowledge ... the extraordinary collaborations ... that brought us to this point.

Even before Atlantis had landed that last time ... Space Florida and the EDC ... in partnership with NASA and the Air Force, ... had been working ... to address ... the coming economic pain. And ... those first few years ... were ... indeed ... hard!

Bob Cabana ... cannot get enough credit ... for his role in those early years! Transferring Shuttle facilities ... and land ... that were no longer needed ... to other organizations and programs ... was not easy. Space Florida and KSC ... worked through many differences ... to enable some of the remarkable projects that have fueled this transformation.

It was not easy or straightforward ... as we were both doing ... what had never been done before ... certainly ... not on this scale.

Multiple Air Force Commanders at the 45th ... also responded ... in aggressive and creative ways ... to adapt their part of the Cape ... to meet ... the new ... commercial space marketplace. It is worth remembering ... that back then ... many viewed commercial space ... as unfit or not ready ... to be considered for serious space work ... let alone exploration ... It was ... the dominant ... perspective of the time!

Those federal agency efforts ... required a level of courage ... which we have long forgotten today ... in the reality ... of rocket boosters returning ... let alone ... re-using those boosters again ... for National Security missions.

The fact that those Federal agencies ... were leaning forward ... as best they could ... deserves our gratitude ... for helping us get ... to where we are today.

(Pause) But I really want to focus on ... 'What's next?

And specifically ... how will our Spaceport ecosystem ... and our space industry evolve in the next 10 years?

What are the challenges ... and how can we work together... with those who have a vested interest ... in that future ... to ensure ... that when we meet again ... 10 years from now, ... we can again ... be proud of what we've accomplished.

At the outset, I must say, ... that at ... the beginning of this year, ... the landscape ... for further extraordinary transformation ... is setting up even better ... than we could ever have hoped for!

At the space policy and budget level, ... even critics admit the previous Administration ... made real progress ... in re-invigorating US Space policy. And thus far, the new Administration ... has begun to build on ... previous Administration plans, ... signaling continued support for our nation's space priorities, ... all good news for US leadership in space.

And that's also reflected ... in the President's FY-22 budget of \$24.8 B for NASA ... which keeps NASA on path ... to landing on the Moon under Artemis ... supporting the Space Launch System and Orion, as well as commercial partnerships for ... a human landing system and Gateway lunar outpost ... and gives science and commercial space a boost.

Similarly, the Space Force ... with a first ever ... stand-alone budget ... is gearing up to invest ... to protect and defend current space assets ... and is positioning to defend the US **"space economy"** ... that will continue to emerge and grow rapidly ... in this next decade!

The FAA too – is licensing and granting more licenses than ever ... And it's important to note ... that over half of all FAA-licensed commercial launches to date ... and 62 percent ... of

the FAA-licensed launches so far this year ... have taken place in Florida.

At the state level ... under the leadership of the Governor and our Board Chair Lieutenant Governor Nunez, ... and with the support of a very ... space-friendly ... Florida legislature ... the space industry has continued to enjoy ... the financial, regulatory ... and space business ... ecosystem support ... to keep Florida at the forefront of the industry!

While all of these policy and budget factors point to an optimistic decade ahead ... There are challenges that we confront today ... that could inhibit our ability ... to continue to succeed.

To address these challenges, ... we must first define them.

Let's start with Infrastructure. ... The US ... has a nation-wide problem of crumbling infrastructure! It is not a surprise ... that the problem exists here ... at the Cape. Much of it is 50 to 70 years old! And most of the new investments we've made ... over the past 10 years ... have been primarily focused ... on direct launch support ... launch pads, new manufacturing facilities, and final assembly and integration assets.

However, the basic underlying infrastructure ... of roads, bridges, power, water, wastewater systems ... that enable everything else to happen ... is also ... in many cases ... old and insufficient ... and are challenged ... just to support ... our present ... and rapidly increasing ... launch cadence.

So, how do we grow ... to meet increasing market needs ... for a more robust ... launch cadence in the future? ... And how do we stay competitive with infrastructure ... in the face of other state and global competition? State and private sector capital may be a critical part of the answer!

Neither KSC nor the 45th ... has had an abundance of new large-project infrastructure, MILCON or other funding ... to support these kinds of items, ... nor are they permitted to spend outside of their specific mission areas ... to support the broader commercial user base ... which now represents the largest constituency of the spaceport.

Nothing illustrates the effect of this ... more than the IRL Bridge! It is a NASA bridge ... which could no longer be properly maintained ... much less replaced with existing budgets. The State was willing to step in ... and partner with the US DOT and NASA ... to enable its replacement.

But there are more bridges ... and more roads ... which will need more dollars ... just to keep up ... with the demands of the growing commercial sector. And there are more projects coming ... driving the imperative ... to provide modernized infrastructure to transport and operate ... such systems as New Glenn ... and then hopefully ... Starship, ... and then others that we are working with ... in the pipeline. (Pause)

Another critical area is commodities ... such as Nitrogen and Helium, ... and soon ... a large demand for Liquid Natural Gas.

There is now ... roughly enough capacity ... for planned major Exploration and national security missions in the future!

But last year, ... commercial launch payloads accounted for 74% ... of the launches at the Cape, and that number will rise.

For us to continue to grow the launch cadence ... of the commercial sector ... the lifeblood of our present success ... and certainly of our future, ... we will need ... modernization and much more capacity than we have.

The same is true of power distribution and wastewater treatment infrastructure! The government may have what it needs for its core missions ... but industry will require more.

Some of the money ... will come, hopefully, from the new Infrastructure bill, which will flow some investment dollars ... to NASA, Space Force, and the state ... But we should ask ourselves ... how do we best plan ... for all of the future upgrades and ... sustainability of those assets ... which are so important for the Cape to stay competitive.

Apart from the infrastructure ... the provision of commodities is a real **commercial opportunity** in itself! The USG, by its very nature, cannot easily be a “provider of last resort” ... nor can it guarantee “levels of service” ... to those with whom it has agreements. They must always say that critical resources may be available for commercial users, unless needed for the government mission. But both, of these terms, ... “provider of last resort” and guaranteed level of service” ... are standard

and essential requirements ... for commercial operations by industry. They must have ... certainty of supply!

And what ... of the one other resource ... that we cannot make more of ... **land?** Although the Cape Canaveral Spaceport is composed of over 160,000 acres of land, ... only a fraction is developed! Most is National Wildlife Refuge. And politically, most of it will likely stay that way!

But **this ... is where** the nation “chose” to go to space, ... and we will need more land ... for appropriate development ... to meet the growth needs ... of the industry and this community! How will that transformation happen in the future?

I suggest again ... that state and private sector capital ... is a key ingredient of that future.

We have already, **collectively facilitated** ... the first steps in that transformation... by transitioning excess Shuttle facilities, like 39A to SpaceX, ... the OPF3 to Space Florida and Boeing ... and OPF’s 1 & 2 to the Air Force for the X-37. In partnership with NASA, ... Space Florida invested \$20+ million in OPF-3 ... and another \$20 Million in OPF’s 1 and 2 ... to make those facilities ready ... for those customers at the Cape. And we are facilitating part of Space X’s infrastructure-build ... and Blue Origin’s infrastructure needs as well.

In the last 10 years, ... the state has enabled through its investments ... over a Billion dollars of new facilities and ground infrastructure at the Cape.

Another of the key infrastructure steps was Exploration Park! To date, we've invested over **\$50** million ... into the ground infrastructure at Exploration park to make it ready ... and fortunately, because it was ready, ... we attracted first Blue Origin, then Airbus-OneWeb Satellites, then Firefly – and soon, we will have used up the last 8 acres of land available.

The next big step, starting now ... is Phase 1 development of the Launch and Landing Facility – the former SLF. We routinely get calls ... from companies that need vacant land ... with infrastructure and environmental permits already done. Phase 1 at the LLF is ... the next step in that evolution ... and we are investing over **\$50** million more into getting **it** ready.

But competition from other states ... is breathing down our neck. If you pay attention to our Board meetings ... we have been working for quite some time ... on competitive projects like Project Kraken (With the potential for over 2000 jobs), ... and Project Beach House (with the potential for over 125 jobs). ... Further, we just announced an agreement with Sierra Space ... to land their Dreamchaser ... at the Launch and landing Facility. Other projects ... are in the pipeline ... and If we are successful in those pursuits ... the global space community ... will take notice of Florida ... once again.

Why is it so critical to invest in infrastructure ... to be ready for coming opportunities?

Because in the face of real global competition ... for space dominance and space business ... we must be more ready ...

and more innovative ... and more attractive than our competitors.

Other states are clearly in the game! The first suborbital space tourist flights ... will happen in either Texas or New Mexico ... this year. And Leadership at Vandenberg is significantly beefing up its infrastructure planning to compete with the Cape and other spaceports ... for commercial launches.

In Texas, SpaceX will soon launch the largest rocket in history. ... Eventually twice as tall ... and twice the thrust of anything flying or planned to fly. ... We should celebrate that as an American vehicle, ... but I know everyone in this room ... would like to see that happen here ... and I'm confident ... we will see Starships ... launch from our spaceport here.

And then there is ... the "no rules other than win" competition with the Chinese, ... who have already beaten us to the dark side of the Moon, ... and with their truly immense capacity ... we can expect them to do other things ... we have not yet done. This is not an acknowledgement of weakness; ... it is a reality we ignore at our peril!

The rising capabilities of China, Russia and other nation states ... has created significant national security threats ... that Space Force leaders are concerned about, ... both kinetic and cyber.

We must continue to invest ... if we are to develop the ability ... to support the desired pace ... and space launch cadence ...

required to maintain capabilities on orbit ... protect space commerce ... and attract new Space Force mission assignments to the Cape!

That is why we are targeting companies ... that will help create ... a “launch-on-demand ... and satellite-on-demand capability **here**. ... The competition is Real!

So, how do we compete? The states have a key role to play in addressing some of the challenges we just talked about!

I believe there are four strategy areas where we need to excel:

- 1.) Reliance on **Commercial**,
- 2.) Modernized and efficiently-accessed **Infrastructure**,
- 3.) A robust Talent Pool of capable **Workforce**,
- 4.) **Capital**, to fuel the growth we are creating!

First, ... reliance on commercial ... It is widely understood that the private sector can often ... innovate and adapt new technology more rapidly ... as well as scale more rapidly ... than can easily be accomplished through government process!

As General Raymond, Chief of Space Operations, has stated so many times, ... the Space Force core national security mission ... is best furthered by enabling the commercial sector to contribute to that mission with its innovation and efficiency.

NASA too ... is entirely dependent on the strength of a robust American private sector ... to meet its core missions of

research and exploration. And like every other human enterprise ... they best succeed by focusing their essential resources ... on core missions ... and relying on industry ... to do the things commercially ... that industry can do so well.

Space Florida is no less focused ... on bringing its tools to bear ... as part of this landscape of competition. ... We do not lead with incentives ... but **we bring private sector capital to bear on infrastructure** ... which is the second strategy area in which ... we must compete and win ... that is how we attract industry here ... and grow the commercial sector we need!

How do we do it? By working with investment partners from the private sector, the Florida DOT, the USDOT, ... and both public and municipal financial markets. We are establishing new financial relationships ... with capital partners ... and employing new creative financing structures ... that enable aerospace companies to acquire ... needed new infrastructure ... to locate here ... and thrive here ... in Florida.

Our role ... is to serve as the state's Space Authority for integrating a comprehensive **Spaceport System** in Florida, and to make the state ... the preferred location ... when considering where to operate for Space ... and Space-related business. **We are a "Space System" Authority** and by that we mean the business ecosystem ... including space infrastructure at the Cape, Cecil Field, Titusville and several other locations ... defined as spaceport territory in the state ... but it also includes the freight, logistics, commodity system and the

regional supply chain ... supporting space operations anywhere in Florida.

Under our space ecosystem role, we invest to enable other operators and suppliers to succeed! Let me be clear, ... Space Florida is NOT seeking to take-over or manage any spaceport! That is NOT our role! But we recognize that the governance structure of the spaceport must evolve with growth ... and we will continue to invest **to ensure** ... the existence of the infrastructure and business operating environment ... that space businesses need ... to locate here ... and thrive here!

With respect to the third strategy area – Workforce ... Space Florida is engaged ... with our statewide partners on initiatives that are critical to our ability to compete ... Specifically, and most importantly, ... issues associated with Workforce, Talent recruitment, retention and continuous skills training.

As most of you are aware, Space Florida has been integral ... in the development of the Space Coast Consortium Apprenticeship Program ... that now serves OneWeb, Blue Origin and others. But that initiative needs to scale up significantly across the state ... to meet market demand.

There are also a host of other promising workforce initiatives aimed at meeting the demands of the marketplace ... with new innovations in training and skills certifications ... and focused on manufacturing 4.0 ... robotic and AI driven skills.

This includes planning ... the establishment of regional workforce training centers ... to mature a more direct and sophisticated pipeline for industry. What is exciting about these ... is that Industry ... has direct involvement in the recruiting and shaping of the people being trained for them.

The Aerospace Workforce problem is critical and pervasive nationally, and even globally. I believe that ... if Florida can demonstrate a strong capability or even dominance in talent development ... the marketplace will respond, ... and we will dominate in many other fields as well. **It is a talent war in the industry, ... and it is a war ... that we cannot lose.**

The last critical strategy area ... is one which Space Florida has long identified ... as an essential component for the future ... that of capital formation.

Modernized ground Infrastructure, ... workforce training facilities ... enhanced R&D and manufacturing facilities, ... and all of the other areas we have talked about as critical issues ... require abundant capital! And ready access to capital ... is the fuel that will enable us to meet future growth needs ... for mature entities, young companies, and startups ... so vital to a healthy ... commercial space ecosystem.

So much of the success we've had to date ... with our federal partners ... in the aggressive transformation of the Cape ... has been due... to our ability to exploit application of small state investments in common-use infrastructure ... and create structures that significantly leverage ... much larger private

capital ... in facilities, equipment, and industrial capacity ... that has caused others to take note of what's happening in Florida.

Our investments ... of state dollars ... have demonstrated a strategic value far above their simple dollar value. In comparison with the private capital invested, ... they are almost immaterial ... but punch far above their weight. That is a point of pride for all of us ... and represents a useful tool for attracting and enabling industry in this next decade (Pause)

We are getting ready for what may be the most exciting decade in space since we first went to the Moon! Apart from the extraordinary things ... we can expect from NASA and industry in space exploration, ... we will also see the realization of a rapidly expanding commercial activity and economy ... in space.

To get ready, we are taking Space Florida through a strategic re-set ... and setting aggressive reach goals ... to drive the organization, our space industry ... and the state ... to 2030!

We have three goals ... are all growth goals! First, ... In the last ten years, we have taken the infrastructure value of projects financed in our portfolio from just under \$100 million in 2010, to just over \$2 Billion by 2020. Our first goal is to take that number to \$10 Billion by end of the decade (2030)

The second, concerns Aerospace Workforce ... Depending on whose numbers you use, Florida is ranked either sixth or

seventh among the states for available aerospace workforce. We have set a goal to move Florida's ranking ... to Fourth or better by the end of the decade. This is a noble goal and an essential indicator of aerospace growth in the state.

Finally, our third goal relates to capital formation ... and is both a qualitative and quantitative goal. We have set the goal for Florida to achieve both the reality and the recognition ... as a leading aerospace capital state, by 2030! We are already well on our way on this!

In conclusion let me articulate that it is a certainty ... that Space-based commercial assets and business activity will continue to grow in this next decade ... and will directly benefit the citizens of Florida, the US and all of humanity.

I am extremely optimistic about the future ... and confident that we are well positioned ... for Florida to play a key role in that grand human enterprise ... and become the leading ground node ... or space trade-port ... for emergence of a new ... in-space industry ... or Cis-Lunar Economy of the next decade. That's our Vision for the Future ... Florida, opening up space for business ... not unlike London did several centuries ago!