The Florida Senate
Local Funding Initiative Request
Fiscal Year 2025-2026

LFIR # 2512

1. Project Title Embry-Riddle Aeronautical University - Hypersonic Equipment

2. Senate Sponsor Thomas Leek

3. Date of Request 2/12/2025

4. Project/Program Description

The proposed hypersonic shock wave equipment will serve as a critical resource for approximately 800 students annually across multiple degree programs, supporting at least 150 formal research opportunities, including 80+ faculty-guided research experiences, 40+ supervised research projects, and numerous externally funded research initiatives, significantly enhancing academic and practical learning outcomes. This funding request will significantly enhance educational, research, and industrial capabilities within the regional aviation and aerospace sectors.

5. State Agency to receive requested funds Department of Education

State Agency contacted? No

6. Amount of the Nonrecurring Request for Fiscal Year 2025-2026

Type of Funding	Amount
Operating	3,000,000
Fixed Capital Outlay	0
Total State Funds Requested	**3,000,000**

7. Total Project Cost for Fiscal Year 2025-2026 (including matching funds available for this project)

Type of Funding	Amount	Percentage
Total State Funds Requested (from question #6)	3,000,000	100%
Matching Funds		
Federal	0	0%
State (excluding the amount of this request)	0	0%
Local	0	0%
Other	0	0%
Total Project Costs for Fiscal Year 2025-2026	**3,000,000**	**100%**

8. Has this project previously received state funding? No

If yes, provide the most recent instance:

Fiscal Year (yyyy-yy)	Amount		Specific Appropriation #	Vetoed
	Recurring	Nonrecurring		

9. Is future-year funding likely to be requested? No

a. If yes, indicate nonrecurring amount per year.

b. Describe the source of funding that can be used in lieu of state funding.

Complete questions 10 and 11 for Fixed Capital Outlay Projects

10. Status of Construction

a. What is the current phase of the project?

○ Planning ○ Design ○ Construction ◉ N/A

b. Is the project "shovel ready" (i.e permitted)?

c. What is the estimated start date of construction?

d. What is the estimated completion date of construction?

e. What funding stream will be used for ongoing operations and maintenance of the project?

11. List the owners of the facility to receive, directly or indirectly, any fixed capital outlay funding. Include the relationship between the owners of the facility and the entity.

12. Details on how the requested state funds will be expended

Spending Category	Description	Amount
Administrative Costs:		
Executive Director/Project Head Salary and Benefits		0
Other Salary and Benefits		0
Expense/Equipment/Travel/Supplies/ Other		0
Consultants/Contracted Services/Study		0
Operational Costs		
Salary and Benefits		0
Expense/Equipment/Travel/Supplies/ Other	Mach 6 Shock Tunnel Preliminary Nominal Facility Main Specifications: • Nominal Mach 6 Nozzle • Nominal Enthalpy of 1.5 MJ/kg • Nominal Driver Pressures up to 1500 psia • Driver Gases: He, N2, Air • Nominal Run Duration: 4 ms (upgrades available) • Nominal Nozzle Exit Diameter: 30 cm (11.81 inches) Budget quotation attached.	3,000,000
Consultants/Contracted Services/Study		0
Fixed Capital Construction/Major Renovation:		
Construction/Renovation/Land/ Planning Engineering		0
Total State Funds Requested (must equal total from question #6)		**3,000,000**

13. Program Performance

a. What specific purpose or goal will be achieved by the funds requested?

The funds will enhance educational, research, and industrial capabilities within the regional aviation and aerospace sectors. They will support acquiring advanced hypersonic equipment, enabling students to gain hands-on experience and develop specialized skills in high demand within the aerospace workforce. Additionally, the project will empower researchers and entrepreneurs to innovate, experiment, and create groundbreaking technologies while strengthening local industries through improved research and development capabilities.

b. What activities and services will be provided to meet the intended purpose of these funds?

The project will provide hands-on educational training for students, allowing them to develop practical expertise in aerospace technology. Researchers will have access to state-of-the-art equipment to conduct experimentation and develop transformative technologies. Entrepreneurs and start-ups will benefit from tools that enable them to pursue advanced projects and foster innovation. Local industries can conduct direct product R&D and enhance their research and development efforts, contributing to technological progress and regional competitiveness.

c. What direct services will be provided to citizens by the appropriation project?

This project will deliver specialized education and training for students, equipping them with the skills necessary for careers in aerospace and high-tech industries. It will provide researchers and entrepreneurs access to advanced technology to support innovation and experimentation. Local industries will benefit from enhanced R&D capabilities, supporting economic growth and job creation within the community.

d. Who is the target population served by this project? How many individuals are expected to be served?

The target population includes students pursuing careers in aerospace and aviation, researchers conducting innovative projects, entrepreneurs working on advanced technologies, and local industries requiring enhanced R&D capabilities. The project is expected to serve 2,000+ students annually, dozens of researchers and entrepreneurs, and multiple businesses in the region.

e. What is the expected benefit or outcome of this project? What is the methodology by which this outcome will be measured?

The hypersonic equipment will create numerous job opportunities by supporting 800 initiatives, in addition to attracting externally funded research opportunities. This extensive involvement will necessitate the hiring of skilled personnel and researcher thereby contributing to job growth in the field. The project is expected to develop a highly skilled workforce with practical expertise in aerospace technologies, drive innovation within the regional aviation and aerospace sectors, and contribute to economic growth by supporting start-ups and industry R&D. These outcomes will be measured by tracking the number of students trained and their job placement in aerospace fields, evaluating the number and impact of research projects utilizing the equipment, assessing the success of supported start-ups, and conducting industry surveys to measure satisfaction and improvements in R&D capabilities.

f. What are the suggested penalties that the contracting agency may consider in addition to its standard penalties for failing to meet deliverables or performance measures provided for in the contract?

The suggested penalty is the reversion of funds, ensuring that any unused or mis-allocated resources are returned to the funding agency.

14. Is this project related to mitigation, response, or recovery from a natural disaster? No

a. If Yes, what phase best describes the project?

- ☐ Mitigation (reducing or eliminating potential loss of life or property)
- ☐ Response (addressing the immediate and short-term effects of a natural disaster)
- ☐ Recovery (assisting communities return to normal operations, including rebuilding damaged infastructure)

b. Name of the natural disaster (or Executive Order # for events not under a federal declaration):

15. Has the entity applied for or received federal assistance for this project?

❑ Yes, Applied

❑ Yes, Received

❑ No

❑ No, but intends to apply

a. If yes, provide the FEMA project worksheet ID#:

b. Provide the total project cost listed on the FEMA project worksheet:

16. Has the entity applied for or received state assistance for this project (other than this request)?

❑ Yes, Applied

❑ Yes, Received

❑ No

❑ No, but intends to apply

a. If yes, specify the program and state agency (ex. Local Government Emergency Bridge Loan, Department of Commerce):

17. Requester Contact Information

a. First Name	Rodney	**Last Name**	Cruise
b. Organization	Embry-Riddle Aeronautical University		
c. E-mail Address	Cruiser@erau.edu		
d. Phone Number	(386)226-7303	**Ext.**	

18. Recipient Contact Information

a. Organization Embry-Riddle Aeronautical University

b. Municipality and County Volusia

c. Organization Type

❑For Profit Entity

☑Non Profit 501(c)(3)

❑Non Profit 501(c)(4)

❑Local Entity

❑University or College

❑Other (please specify)

d. First Name	Rodney	**Last Name**	Cruise
e. E-mail Address	Cruiser@erau.edu		
f. Phone Number	(386)226-7303	**Ext.**	

19. Lobbyist Contact Information

a. Name	David Browning
b. Firm Name	The Southern Group
c. E-mail Address	browning@thesoutherngroup.com
d. Phone Number	(850)671-4401

The information provided will be posted to the Florida Senate website for public viewing if sponsored by a Senator.