



TANGOFLIGHT



TM

Where S.T.E.M. Takes Flight





TANGOFLIGHT



An **educational non-profit** company created to inspire the next generation of engineers, pilots, aviation mechanics and technicians.

Our **proprietary curriculum** provides meaningful classroom learning with real hands-on training.

Students apply classroom knowledge to building an actual, FAA certified airplane, in school!

Why it Matters

In the coming 20 years, the aviation industry will require:

- 208,000 new pilots
- 192,000 new aviation mechanics and technicians

Boeing Study (rev 2021)

The Airplane Tango Builds



VAN'S RV-12iS



WHERE S.T.E.M. TAKES FLIGHT | WWW.TANGOFLIGHT.ORG | (512) 809-0964 | dan@tangoflight.org



Tango History

Tango partnered with the **AIRBUS Foundation** and **Wichita State University** to create an innovative curriculum that provides students;

- Introduction to **Mechanical, Electrical and Aerospace** engineering
- **Technical and mechanical skills**
- Fundamentals and mechanics of aircraft and avionics equipment
- Aviation maintenance and inspection
- Aircraft structure and assembly

TANGO CURRICULUM

Since 2016, Tango has worked with educators and aviation experts across the country to construct an **exciting CTE based, STEM-focused** educational program.

The building of the airplane works to reinforce the STEM principles and objectives of the classroom curriculum.

Tango Curriculum

This high school course helps to prepare a highly competitive, collaborative, and skilled youth.

The program is consistent with:

- ✓ National Education Standards
- ✓ Consistent with CTE/STEM TEKS
- ✓ DOE STEM and College Readiness Standards
- ✓ STEM Workforce Expectations

The building of the airplane works to reinforce the STEM principles and objectives of the classroom curriculum.

A Twin-Track Curriculum

Traditional Classroom Curriculum (Aerospace Focused STEM course)

- Introduction and Safety
- Aircraft Structures
- Aircraft Hardware and Metals
- Mathematics in Aviation
- Aviation Physics

Aircraft Construction Curriculum (Build Guidance)

- Bulletins/Advisories
- Changes/Revisions
- Up-to-Date Plans by Section
- PPT Decks for amplification
- Time-Lapse Videos of Construction

Tango Curriculum

- ✓ Lesson Plans
- ✓ PPT Decks
- ✓ In-Class Activities
 - ✓ Quizzes
 - ✓ Exams
- ✓ Worksheets
- ✓ Videos

Industry-Based Certification

Level I and Level II certifications based on demonstrative proficiency in the following areas:

- Professional Workplace Skills
- Aviation/Aerospace Technical Skills
- Maintenance and Construction Skills

The students must be recommended for each certification and must successfully complete, and pass, a written exam, an oral exam and a practical examination for the classroom teacher, lead mentor and/or industry leadership board.

Students have the opportunity to earn these certifications as they demonstrate their proficiency in required skills.

What It Takes “A Teacher”

A Motivated Classroom Teacher

- Certified to teach – School provides the teacher
- Understands how to read curriculum
- Qualified to read, amend and follow lesson plans to meet course objectives

What It DOES NOT Take

The Tango Flight curriculum **does not** require aviation or aerospace expertise for the classroom teacher...just a good teacher!

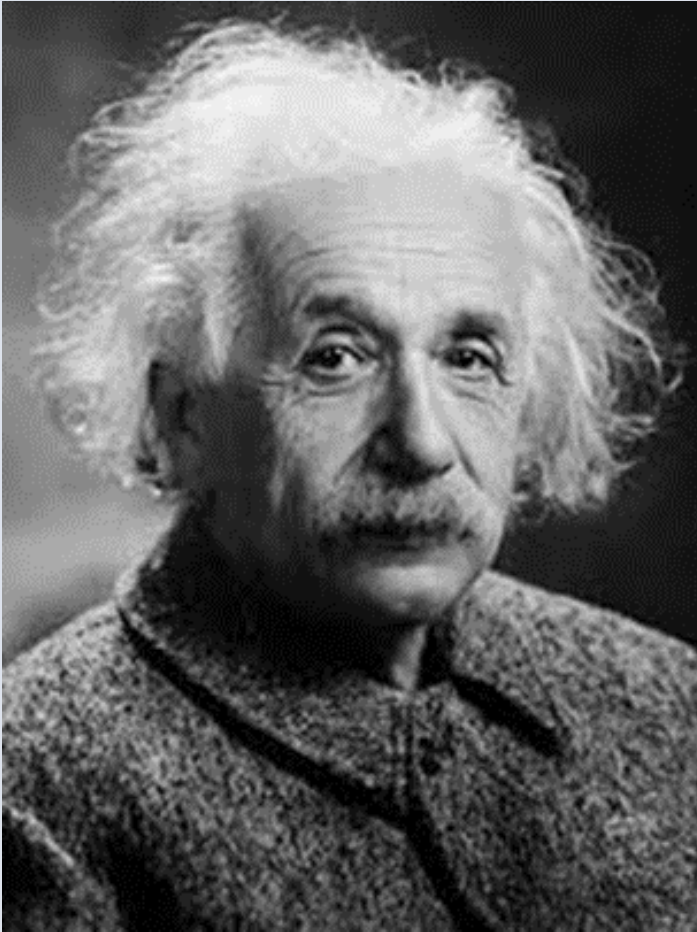


Mentors

Mentors! Patient, Motivated and Professional

- These are the volunteers who build the airplane with the students.
- They share their professional **knowledge** and **experience** (not necessarily in building planes – many come from aviation, aerospace and engineering backgrounds...others are aviation enthusiasts who want to help students build an airplane.)
- They ensure students are focused on **safety** and **professionalism** by example.
- They build a connection with young people so they have someone to look up to and respect in the real world.

What It Does Not Take



It does not take an Albert Einstein or a Mother Theresa...though that would be nice...

At the end of the day...this is not about an airplane...this is about a connection...and helping young people get to the next level.



How Much Does Tango Cost?

❖ Curriculum subscription -	\$4,400.00
❖ Instructor Training and Certification -	\$1,149.00
❖ Mentor Identification/Training/Certification -	\$1,529.00
❖ Logistics and Support -	\$2,420.00
❖ On-Site Visits and FAA Certification -	\$4,375.00**

Total Annual Expense -----

\$13,873.00*

Perkins Friendly

How Much Does Tango Cost? The One-Time, For All-time, Deposit

- A one-time cost that is fully refundable to the District, supporting company or Foundation, following completion of the final build.
- Limits non-profit financial exposure.
- Three plans are offered:
 - Option 1: One-time payment of \$ 89,962.00 at signing or
 - Option 2: \$9,000 toward deposit due at signing and then two payments spread over two fiscal years – \$40,481.00 each
 - Option 3: \$9,000 toward deposit due at signing and 4 payments across 4 fiscal years of \$21,140.00 each. *(This includes a service charge of \$899.50/year)*

\$89,962.00

The Tango Difference

- National standards-based dual-credit curriculum
- Full logistics support - timely delivery of build kits and associated parts
- State-of-the-Art virtual classrooms and on-line training resources for instructors, mentors and students
- Assistance in lab and tool set-up and organization
- Storeroom organization and management training

The Tango Difference

- Routine Site Visits and scheduled inspections by Tango Flight directors
- FAA inspection and certification of the airplane
- Instructor training
- Mentor Identification and training
- Ongoing build assistance, 24/7
- First flight and phase I fly off
- Comprehensive liability and flight insurance

The Tango Bottomline

- An affordable, turn-key educational program.
- Innovative “hand-in-glove” curriculum.
- Limits District liability exposure.
- Eliminates after-build storage, service and maintenance costs.
- Districts are not forced into the “Airplane Business”.
- Classroom activities are never impacted by disposition of the previous aircraft.

TANGOFLIGHT

TANGOFLIGHT



Applied Learning

TANGOFLIGHT

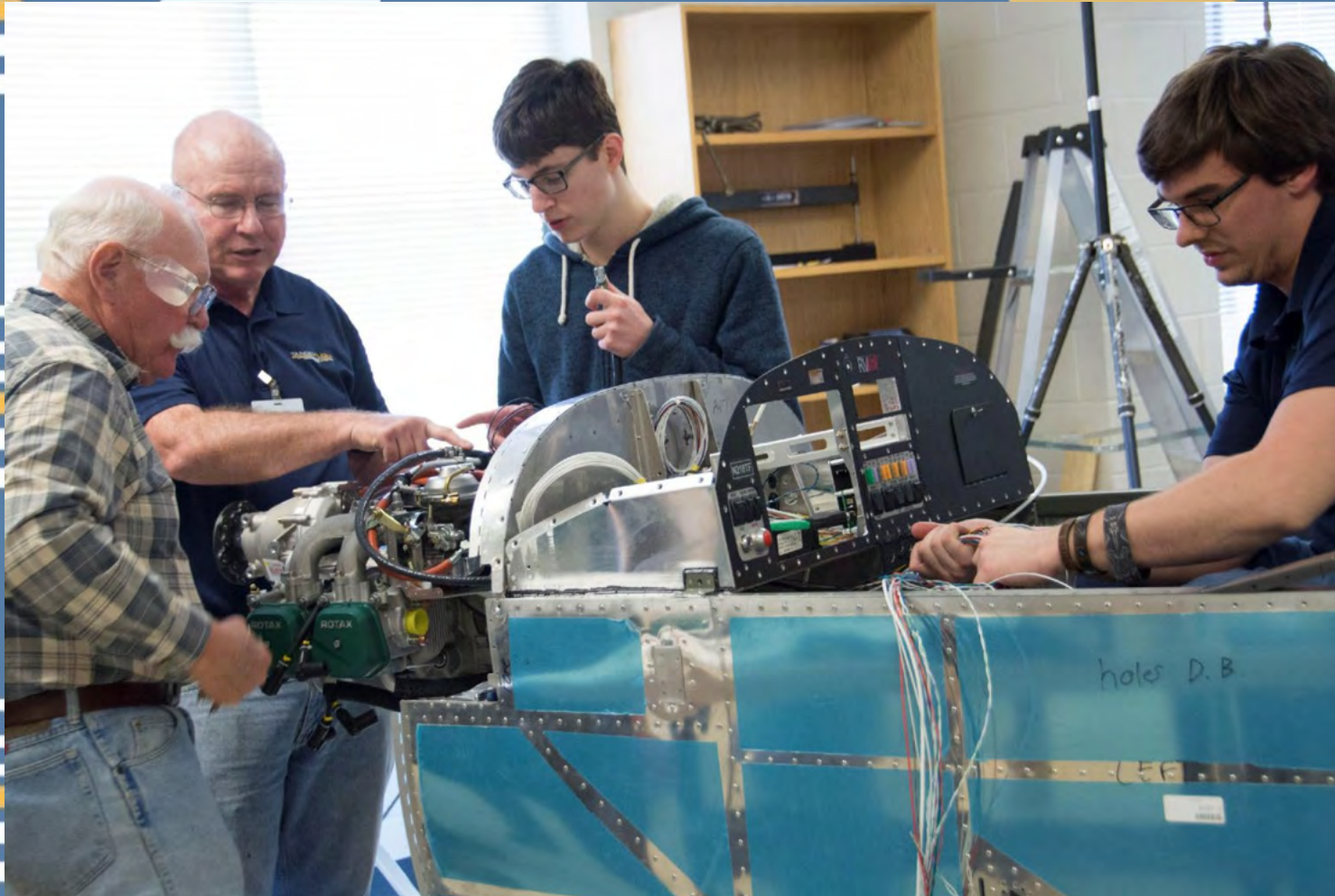
TANGOFLIGHT



Hands-On Experience

TANGOFLIGHT

TANGOFLIGHT



Skillset Training



Tango Flight Corporate Sponsors

AIRBUS FOUNDATION

GARMIN



VAN'S AIRCRAFT
TOTAL PERFORMANCE



Mentorship



WHERE S.T.E.M. TAKES FLIGHT | WWW.TANGOFLIGHT.ORG | (512) 809-0964 | dan@tangoflight.org





TANGO FLIGHT WHERE STEM, *REALLY* DOES, TAKE FLIGHT!!!



