Investments for eVTOL Workforce Development

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Strategies for eVTOL Workforce Growth

Increase Graduate (MS and PhD) Students at Current VLRCOEs and Related Centers
– At institutions where a comprehensive VTOL curriculum is already offered, capacity exists, and grad students can easily be increased by a factor of 2-3.
– Cost of additional ~50 grad students is ~$5M/year (in supp. to VLRCOE program).

Hire Adjunct Professors and Professors of Practice at VLRCOES and Related Centers
– For example, retired experts from Army/DoD/NASA Labs, or VTOL industry.
– 10-12 such appointments would cost around $1.5-2M/year (in supp. to VLRCOE program), and increase graduate training capacity by an additional ~50/year.
– The $1.5-2M/year covers professorial appointments, grad students supported on institutional funds or other research contracts.
Strategies for eVTOL Workforce Growth

Increase in Tenure/Tenure-Track Faculty at VTOL/eVTOL-active Universities

-- eVTOL industry leverages Institutional investment (based on grad student and research funding growth).

-- 5-7 additional Tenure/Tenure-Track faculty can support ~50 additional graduate students (at cost of $5M/year)

Above 3 combined (at $12M/year) would support an additional ~150 students spread across Centers and partner institutions, resulting in 50-75 MS/PhD graduates/year entering the VTOL/eVTOL job market.
Workforce Growth through Government/Industry Collaboration

Develop VLC-style Government-Industry Consortium (for pre-competitive research)
-- Identify areas of research of interest to large parts of eVTOL industry.
-- A substantial part of this funding directed to eVTOL active Centers/partners. Research investment also supporting workforce development.
-- Boost to new eVTOL companies may not have the resources that legacy VTOL companies do.
-- Universities awarded 2-3 year grants.
-- $5-6M/year to the universities (industry-government cost-share), can result in an additional ~50-60 graduate students (20-30 additional students joining the eVTOL workforce each year).
**Summary**

-- Using a combination of additional direct support from DoD to VLRCOE program, and VLC-type shorter term industry-government joint support can result in up to 70-100 additional VTOL/e-VTOL trained MS/PhD students/year entering the workforce.

-- Cost of $17-18M/year.

-- These trained graduates with advanced degrees would be the linchpins in the VTOL/eVTOL industry, around whom other engineers (with undergraduate degrees) can work, to meet the total workforce needs.