

DEDICATED TO HELPING BUSINESS ACHIEVE ITS HIGHEST GOALS.



Future of Aviation Maintenance


NBAA Project Bootstrap and the AMTE

Washington, DC | Summer 2010

What Is Project Bootstrap?

A proposed higher-level aviation maintenance certification program developed by the Training and Advanced Education Subcommittee of NBAA's Maintenance Committee in collaboration with strategic industry partners.

Under NBAA's proposed Project Bootstrap, the new certification category for aviation maintenance professionals will be called **aviation maintenance technical engineer (AMTE)**.

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This Initiative Is:

- Led by maintenance training experts
- Steered by maintenance practitioners
- Overseen by individuals with combined decades of experience working as aviation maintenance professionals



Desired Outcomes

- Added value to the individual
- Added value to the business aviation industry
- Increased industry retention of valuable resources
- Increased industry safety levels
- Greater potential to draw young people into industry



Our Primary Partner Is:

- The National Center for Aerospace & Transportation Technologies (NCATT) – <http://www.ncatt.org>
- NCATT and its partners establish standards, certifications, and accreditation and recognition programs for the aerospace and transportation industries

What Is the AMTE?

The Formula: $A\&P/IA + AET = AMTE$

The AMTE will combine the traditional FAA airframe and powerplant (A&P) license and inspection authorization with NCATT's aircraft electronics technician (AET) avionics certification

The AET certification identifies the core knowledge of an aircraft electronics/avionics technician that is common across the aviation industry, including business aviation flight departments.

NCATT Avionics Base Standard

The aircraft electronics technician (AET) is the primary certification and is required for all endorsements in the career field.

AET endorsements:

- Radio communication systems (RCS)
 - Dependent navigation systems (DNS)
 - More in development
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AET Endorsements in Development

- Advanced Digital
 - Autopilot
 - Bench
 - Communication Systems
 - Enhanced Vision
 - In Flight Entertainment
 - Installation/Integration
 - Instruments
 - Navigation Systems
 - Power Generation/Distribution
 - Surveillance
 - Weather Avoidance
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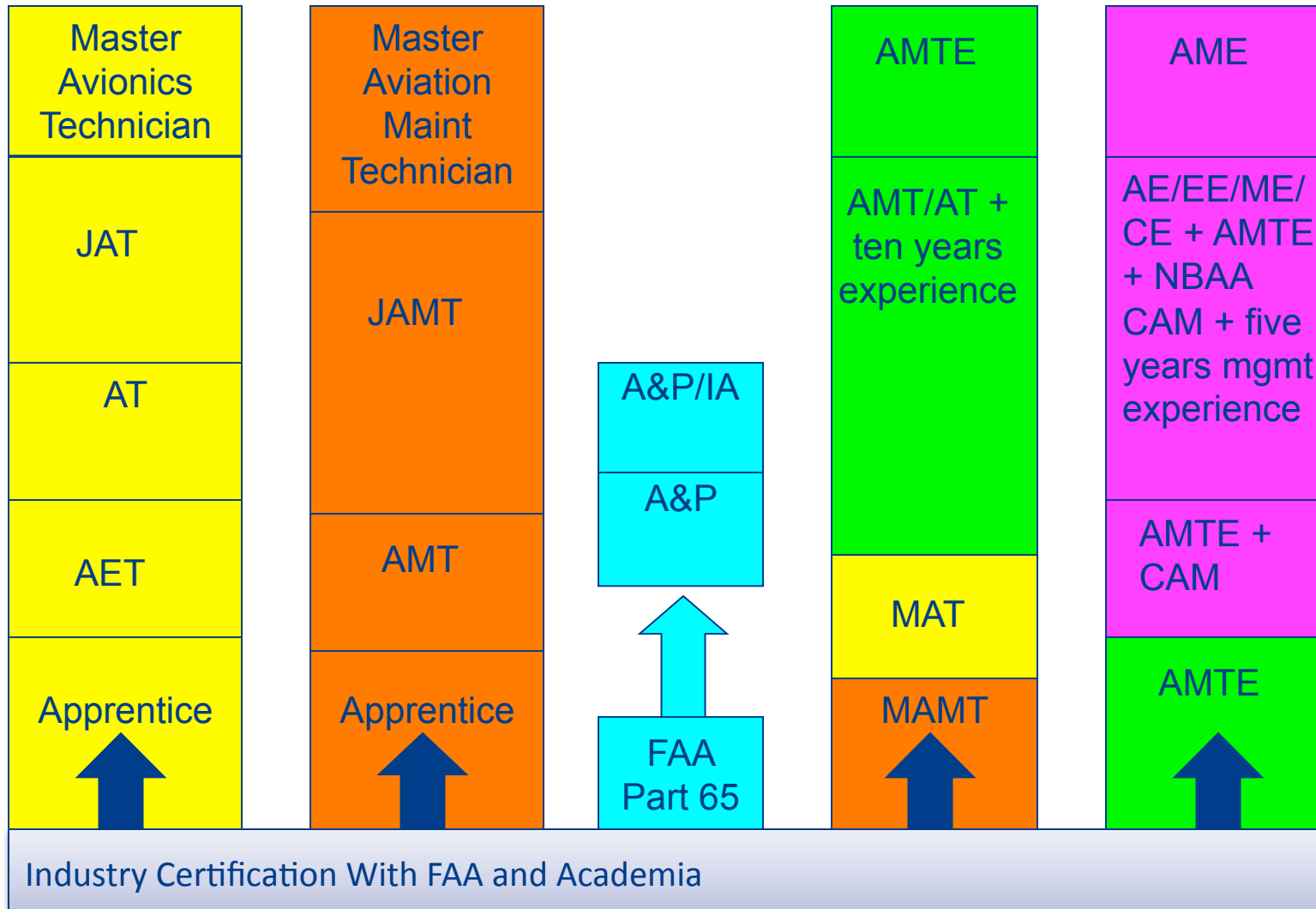
NCATT Avionics Milestones

- NCATT was established in 2003 through a National Science Foundation grant
- Over 900 AET certificates have been given to date
- AET-certified technicians are currently found in 39 states and three countries

Why NCATT for Project Bootstrap?

- Its mission is compatible with NBAA's
 - It provides the avionics technician certification (AET) necessary for the broader AMTE certification
 - Its AET certification program is already complete, with hundreds of AETs certified to date
 - It is the sole source for aviation industry certification/ accreditation (non-regulatory)
 - It enables partnership with all facets of the aviation industry
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Career Growth Model



Future of the AMTE

Once the model is established, the FAA can adopt and certify this position.

There will be increased privileges and authority for both aviation maintenance technicians (AMTs) and AETs once they reach AMTE status; for example:

- FAA DER/DAR pool
 - FAA PMI/PAI pool
 - Signoff authority for 8130s
 - Signoff authority for 91.411/413
 - Signoff authority for 8110s
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Role of the ASG

Once all program elements are defined, a volunteer group called the Aviation Standards Group (ASG), which is to be sponsored by NBAA and industry original equipment manufacturers, will begin to hear experience dissertations from individuals seeking AMTE certification.

The ASG designs the AMTE certification standards and will administer the AMTE candidate-review process.

ASG AMT Progression Chart

AMT Ratings	Academic	Experience	Recurrent Training
"Apprentice"			Annual Recurrent Training
	Employed as a working technician under the supervision of an A&P Technician with an A or P certificate	No experience required	Biennial Recurrent Training
"Aviation Maintenance Tech"	FAA A&P +		12 Hours A&P Technical Training
	Completion of military training OR	No experience required	2 Hrs FAA reg training
	Civilian tech/147 school OR		
	FAA Certified Repairman OR		
	FAA Silver Award level OR		
	FCC GROL		
"Journeyman AMT"	AMT +	2 years Demonstrated Aviation Tech OR	16 Hours A&P Technical Training +
	IA OR	Military E4 - E6 Aviaion Rate	2 Hrs FAA reg training
	ASG AT OR		8 Hours Soft Skills Training
	Prof 91/121 Initial A/C Training cert OR		
	AS degree in aviation maintenance OR		
	FAA Ruby Award level OR		
	PAMA/SAE AME cert OR		
	Private Pilot's Certificate		
"Master AMT"	JAMT +	4 years Aviation Tech. OR	16 Hours Soft Skills Training +
	ASG JAT OR	Military E7 - E9 aviation rate	2 Hrs FAA reg training
	NDT Level Two cert OR		12 Hours Mgmt/Leader/Super Training
	Composite Level cert OR		
	FAAST Team Member OR		
	FAA Dispatchers certificate OR		
	Pilot's Instrument Rating OR		
	FAA Diamond Award		
	FAA Charles Taylor Award OR		
	BS ME/CE/MM + ASG AMT		

ASG AMTE Progression Chart

AMTE Rating	Academic	Experience	Recurrent Training
"AMTE"	MAMT + MAT	10 years accumulated experience in any category or silo	Annual Recurrent Training
			Biennial Recurrent Training
		16 Hours Soft Skills Training	
		2 Hrs FAA reg training	
		12 Hours Mgmt/Leader/Super Training	



How to Afford the New Standards?

Consider applying for the **NBAA Maintenance Technical Reward and Career Scholarship (Maintenance TRACS)**, which offers current and aspiring maintenance technicians the opportunity to receive aircraft, engine and avionics training awards.

<http://www.nbaa.org/scholarships>




Typical Maintenance TRACS Offerings

- Bombardier Aerospace – Global, Challenger 604, Learjet 60 Courses
 - CAE Simuflite – Initial Maintenance Course, Various Models
 - Cessna Aircraft – Citation Initial Courses
 - Flight Safety – Principals of Troubleshooting Course
 - GE Engines – CFE 34 Engine Line Maintenance Course
 - Global Jet Services – Initial Course (Open Catalog)
 - Gulfstream Aerospace – Initial Maintenance Course
 - Hawker Beechcraft Corp. – Any Model Maintenance Initial Course
 - Honeywell Inc. – Avionics and Mechanical Courses
 - P&WC – PT6 Engine Line Maintenance Courses
 - StandardAero – Engine Line Maintenance Course
 - Rolls-Royce – AE3007 Engine Line Maintenance Course
 - Williams International – FJ Series Engine Line Maintenance Course
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In Conclusion

Project Bootstrap will provide:

- Career direction, expansion, destination
 - Evolutionary growth for maintenance professionals
 - New stimulus at career entry point
 - Educational growth opportunities
 - Added value to company's bottom line
 - Increased performance in safety and quality
 - Increased earnings potential for maintenance professional
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For More Information

- This Project Bootstrap presentation was developed by the Training and Advanced Education Subcommittee of the NBAA Maintenance Committee
 - Direct questions to NBAA Director, Technical Operations Eli Cotti at ecotti@nbaa.org
 - Learn more about the NBAA Maintenance Committee online at <http://www.nbaa.org/committees>
 - Review Project Bootstrap Frequently Asked Questions at www.nbaa.org/prodev/bootstrap/faq
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