ATD TRAINING CONTENT AND LOGGING PROVISIONS

GACAR PART – 60

Organization Name			
Organization's Address		Contact Number	
Representative Name		Position	
Representative Contact Number		Email Address	

APPENDIX D. TRAINING CONTENT AND LOGGING PROVISIONS

			COMPLIANCE		
	Maneuvers and Tasks	GACAR Reference	YES	NO	NA
D.1.1	This is a curriculum that can use an Aviation Training Device (ATD) for flight tasks where an instructor teaches the required knowledge in the classroom and then follows with procedural training. For example, in an integrated ground and flight instrument training curriculum, an authorized instructor teaches the required knowledge for an instrument landing system (ILS) approach through ground and classroom training. The instructor adds flight procedures in the ground training environment. After the student has gained the required knowledge and understands the procedures, the instructor then adds to practicing the psychomotor skills of the task. The instructor may do this by providing a simulated flight environment in a specifically approved ATD, flight training device (FTD), or full flight simulator (FFS). When the student becomes proficient with the instrument procedure in the training device, then the instruction would transition to the aircraft to verify proficiency.	AC 61-136-B	☐	☐	☐
D.1.2	GACA recommends that an instructor who intends to use an ATD for training pilot candidates obtain documented advanced training from the manufacturer (or person proficient with its use) on all aspects of the training device operation. This indoctrination should include a complete review of the available databases, aircraft configurations, systems review (avionics and aircraft systems and performance), weather simulations, systems failure capabilities, instructor station use, and support available from the manufacturer. This would be similar to someone becoming familiar with and proficient in a new aircraft as described for transition or differences training.	AC 61-136-B	☐	☐	☐
	Note: GACA recommends that instructors use an ATD in an integrated training curriculum because of the benefits that a structured training course provides.	AC 61-136-B	☐	☐	☐
D.2	Course Content. GACA expects the instrument tasks below to be incorporated into an integrated ground and flight training curriculum in which an ATD is used. Procedural training for visual flight rules (VFR) operations can also be included in a syllabus or training course outline (TCO) for primary flight training. Procedural tasks might include traffic pattern operations, navigation, slow flight and stalls, control and maneuvering of an aircraft solely by reference to instruments, and emergency operations. Preparation for a flight review could also be incorporated. Training should include GACA-approved TCOs GACAR Part 141 flight schools. These training tasks would be taught to the proficiency requirements of the certification standards appropriate for the pilot certificate or privilege sought.	AC 61-136-B	☐	☐	☐
D.2.1	Flight by Reference to Instruments.	AC 61-136-B	☐	☐	☐
	• Basic attitude flying;	AC 61-136-B	☐	☐	☐
	• Straight and level flight;	AC 61-136-B	☐	☐	☐
	• Change of airspeed;	AC 61-136-B	☐	☐	☐
	• Constant air speed climbs;	AC 61-136-B	☐	☐	☐
	• Constant airspeed descents;	AC 61-136-B	☐	☐	☐
	• Constant rate climbs;	AC 61-136-B	☐	☐	☐
	• Constant rate descents;	AC 61-136-B	☐	☐	☐

	• Level turns, including standard rate turns;	AC 61-136-B	☐	☐	☐
	• Climbing turns;	AC 61-136-B	☐	☐	☐
	• Descending turns; and	AC 61-136-B	☐	☐	☐
	• Steep turns.	AC 61-136-B	☐	☐	☐
D.2.2	Abnormal and Emergency Procedures.	AC 61-136-B	☐	☐	☐
	• Partial panel;	AC 61-136-B	☐	☐	☐
	• Timed turns;	AC 61-136-B	☐	☐	☐
	• Compass turns and associated errors (if installed);	AC 61-136-B	☐	☐	☐
	• Instrument failures;	AC 61-136-B	☐	☐	☐
	• Automation failures (primary flight display (PFD), Global Positioning System (GPS) navigation, systems management, etc.);	AC 61-136-B	☐	☐	☐
	• Flight automation failures (such as autopilot failure) including recovery from potential loss of control;	AC 61-136-B	☐	☐	☐
	• Encountering unexpected weather conditions;	AC 61-136-B	☐	☐	☐
	• Electrical, systems or equipment failures;	AC 61-136-B	☐	☐	☐
	• Procedures for turbulence;	AC 61-136-B	☐	☐	☐
	• Loss of control procedures (due to weather radar (WX) conditions, equipment failure, flight automation, etc.);	AC 61-136-B	☐	☐	☐
	• Unusual attitude recovery;	AC 61-136-B	☐	☐	☐
	• Engine failure(s) (partial or complete); and	AC 61-136-B	☐	☐	☐
	• Hydraulic or boost failures.	AC 61-136-B	☐	☐	☐
D.2.3	Radio Navigation Procedures.	AC 61-136-B	☐	☐	☐
	• Use of very high frequency omni-directional range (VOR), Localizer (LOC), ILS, and Area Navigation (RNAV) including GPS;	AC 61-136-B	☐	☐	☐
	• Holding patterns (VOR, ILS, LOC, GPS, Intersection, and waypoints (WPT));	AC 61-136-B	☐	☐	☐
	• Use of distance measuring equipment (DME);	AC 61-136-B	☐	☐	☐
	• Use of automatic direction finder (ADF)/non-directional radio beacon (NDB) (optional); and	AC 61-136-B	☐	☐	☐
	• Use of autopilot/flight director (FD) (optional).	AC 61-136-B	☐	☐	☐
D.2.4	Instrument Approach Procedures (IAP).	AC 61-136-B	☐	☐	☐
D.2.4.1	Precision:	AC 61-136-B	☐	☐	☐
	• ILS,	AC 61-136-B	☐	☐	☐
	• Wide area augmentation system (WAAS) with vertical navigation (VNAV) (optional), and	AC 61-136-B	☐	☐	☐
	• GPS Landing System (GLS).	AC 61-136-B	☐	☐	☐
D.2.4.2	No precision	AC 61-136-B	☐	☐	☐
	• VOR,	AC 61-136-B	☐	☐	☐
	• LOC,	AC 61-136-B	☐	☐	☐
	• RNAV (including GPS),	AC 61-136-B	☐	☐	☐
	• WAAS (optional),	AC 61-136-B	☐	☐	☐
	• ADF/NDB (optional),	AC 61-136-B	☐	☐	☐
	• ILS/LOC back course (LOC BC), and	AC 61-136-B	☐	☐	☐
	• Missed Approach Procedures (MAP) for all of the procedures above.	AC 61-136-B	☐	☐	☐
D.2.5	Communications Procedures.	AC 61-136-B	☐	☐	☐

	• Air traffic control (ATC) clearances;	AC 61-136-B	☐	☐	☐
	• Taxi clearance and instructions (emphasis on runway incursion prevention);	AC 61-136-B	☐	☐	☐
	• Departure clearance (DCL);	AC 61-136-B	☐	☐	☐
	• En route clearances;	AC 61-136-B	☐	☐	☐
	• Holding instructions;	AC 61-136-B	☐	☐	☐
	• Arrival clearances;	AC 61-136-B	☐	☐	☐
	• Missed approach instructions and clearances;	AC 61-136-B	☐	☐	☐
	• Radio advisories and warnings;	AC 61-136-B	☐	☐	☐
	• Automatic Terminal Information Service (ATIS) and common traffic advisory frequency (CTAF); and	AC 61-136-B	☐	☐	☐
	• Significant meteorological information (SIGMET), Airmen's Meteorological Information (AIRMET), Notices to Airmen (NOTAM), Flight Service Station (FSS), communications, and flight plan changes.	AC 61-136-B	☐	☐	☐
D.2.6	Cross-Country Procedures.	AC 61-136-B	☐	☐	☐
	• Departure,	AC 61-136-B	☐	☐	☐
	• En route,	AC 61-136-B	☐	☐	☐
	• Diversion to alternate,	AC 61-136-B	☐	☐	☐
	• Arrival, and	AC 61-136-B	☐	☐	☐
	• MAPs.	AC 61-136-B	☐	☐	☐
	Note: Training requirements for pilot certification that require cross- country, solo, night, or takeoff and landings cannot be accomplished in ATDs. Some training requirements specify that they must be accomplished in an aircraft. For example, the 3 hours of control and maneuvering of an airplane solely by reference to instruments described in GACAR part 61, APPENDIX C TO GACAR PART 61 for a private pilot must be accomplished in a single-engine airplane. Authorized instructors may teach such maneuvers and tasks in GACA-approved training device, and then transition to the aircraft for those same maneuvers and tasks necessary to meet the aeronautical experience requirements required for pilot certification.	AC 61-136-B	☐	☐	☐
D.3	Logging Training Time and Experience. Authorized instructors utilizing a GACA-approved ATD for airmen training, pilot time, and experience requirements are required to log the time as dual instruction and as basic aviation training device (BATD) or advanced aviation training device (AATD) time appropriately. Any columns that reference flight time should remain blank when logging ATD time. ATD time can only be logged as Instruction Received (Dual), Instrument Time, or Total Time as reflected on the pilot time section of GACA Form 8710-1, Airman Certificate and/or Rating Application. Simulated instrument time can be logged in an ATD, but only during the time when the visual component of the training session is configured for instrument meteorological conditions (IMC) and the pilot is maintaining control solely by reference to the flight instruments. Logging time in this fashion will allow a pilot to credit this time towards the aeronautical experience and instrument experience requirements as specified in part 61 or part 141. It is required under § 61.13 that the type and identification of the ATD be included when logging pilot time as described in the letter of authorization (LOA). It is the responsibility of the flight instructor, student, or certificated pilot to verify the device is qualified and approved for training or experience requirements. It would be appropriate for the person using the ATD to retain a copy of the LOA. Evaluators such as Designated Pilot Examiners (DPE) are instructed to request a copy of the LOA from applicants logging ATD pilot time, to verify the time acquired in the trainer qualifies for the minimum experience requirements for a certificate or rating.	AC 61-136-B	☐	☐	☐
	Note: There are no restrictions on the amount of training accomplished and logged in training devices. However, the regulatory limitations on maximum	AC 61-136-B	☐	☐	☐

	credit allowed for the minimum pilot certification requirements are specified by parts 61 and 141 and in the LOA. No approvals or authorizations are provided for aircraft type ratings using ATDs.				
D.4	Reporting ATD Use and Training Data. If required, Pilot schools, flight instructors, and owners using GACA-approved ATD for airmen training or experience requirements are requested to notify GACA annually or as required that would include the information listed below. This information is voluntary and will be used to continually validate the authorized use of the ATD and to determine whether additional uses or regulatory amendments are necessary:	AC 61-136-B	☐	☐	☐
	• The name, address, and phone number of the individual, organization, and pilot school certificate number (if applicable) providing the training or experience;	AC 61-136-B	☐	☐	☐
	• Address and location of the ATD;	AC 61-136-B	☐	☐	☐
	• The courses for pilot certification in which the ATD will be used;	AC 61-136-B	☐	☐	☐
	• The make and model (M/M) of the ATD being used for training and the LOA expiration date,	AC 61-136-B	☐	☐	☐
	• Notice of sale, change of location, or discontinued use of the ATD; and	AC 61-136-B	☐	☐	☐
	• Any information considered helpful in determining the level of effectiveness of the device.	AC 61-136-B	☐	☐	☐

Remarks

Inspection Result	
☐ Satisfactory	☐ Unsatisfactory

No.	Inspector Name	Signature	Date (dd/mm/yy)