



U.S. Department of Transportation  
Federal Aviation Administration  
Washington, DC

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## Flight Standardization Board Report

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Revision: 5  
Date: XX/XX/XXXX

### Manufacturer Honda Aircraft Company

Type Certificate Data Sheet (TCDS)	TCDS Identifier	Marketing Name	Pilot Type Rating
A00018AT	HA-420	HondaJet	HA-420
A00018AT	HA-420	HondaJet Elite	HA-420
A00018AT	HA-420	HondaJet APMG	HA-420
A00018AT	HA-420	HondaJet Elite S	HA-420
A00018AT	HA-420	HondaJet APMG S	HA-420
A00018AT	HA-420	HondaJet Elite II	HA-420

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## TABLE OF CONTENTS

Section	Page
1. RECORD OF REVISIONS.....	3
2. INTRODUCTION.....	3
3. HIGHLIGHTS OF CHANGE .....	3
4. BACKGROUND .....	3
5. ACRONYMS.....	4
6. DEFINITIONS .....	6
7. PILOT TYPE RATING .....	7
8. RELATED AIRCRAFT .....	8
9. PILOT TRAINING.....	8
10. PILOT CHECKING.....	11
11. PILOT CURRENCY .....	11
12. OPERATIONAL SUITABILITY.....	11
13. MISCELLANEOUS .....	11
APPENDIX 1. DIFFERENCES LEGEND.....	13
APPENDIX 2. MASTER DIFFERENCES REQUIREMENTS (MDR) TABLE .....	15
APPENDIX 3. DIFFERENCES TABLES.....	16
APPENDIX 4. ELECTRONIC CHECKLIST EVALUATION .....	45

## 1. RECORD OF REVISIONS

Revision Number	Section(s)	Date
Original	All	01/15/2016
1	Cover Page, Table of Contents, Record of Revisions, Highlights of Change, 8.2.6, Appendix 4	09/28/2016
2	All	02/13/2019
3	1, 3, 4, 5, 8, 9, 10, 11, 12, 13, Appendices 2, 3, and 4	02/13/2023
4	1, 2, 3, 4, 5, 6, 9, Appendices 2 and 3	01/13/2025
5	Cover Page, 1, 2, 3, 4, 7, 8, 9, Appendices 2, 3, and 4	XX/XX/XXXX

## 2. INTRODUCTION

The Aircraft Evaluation Division (AED) is responsible for working with aircraft manufacturers and modifiers during the development and Federal Aviation Administration (FAA) certification of new and modified aircraft to determine:

- 1) The pilot type rating,
- 2) Flightcrew member training, checking, and currency requirements, and
- 3) Operational suitability.

This report lists those determinations for use by:

- 1) FAA employees who approve training programs,
- 2) FAA employees and designees who certify airmen, and
- 3) Aircraft operators and training providers, to assist them in developing their flightcrew member training, checking and currency.

## 3. HIGHLIGHTS OF CHANGE

The purpose of this revision is determination of differences training and checking from the HA-420 Advanced Performance Modification Group (APMG) to the HA-420 APMG S modification, and HA-420 Elite S to the HA-420 APMG S. Bullet points added to Special Emphasis Areas for landing procedures. In addition, changes have been made to the training, checking, and currency requirements from the HA-420 Elite to the HA-420 Elite II in Appendix 3, Differences Tables.

## 4. BACKGROUND

The AED General Aviation Branch, formerly the Small Aircraft Branch, formed an flight standardization board (FSB) that evaluated the Honda Aircraft Company HA-420 aircraft as defined in FAA Type Certificate Data Sheet (TCDS) No. A00018AT. The evaluation was conducted in October 2015 in Greensboro, NC, using the methods described in FAA Advisory Circular (AC) 120-53B, Guidance for Conducting and Use of Flight

Standardization Board Evaluations. For the remainder of this document, Honda Aircraft Company and Honda Aircraft are the same entity.

The electronic checklist (ECL) was evaluated after the completion of a formal FSB. The evaluation was completed in March of 2016 at the Honda Aircraft facility in Greensboro, NC.

On May 17, 2018, the FSB conducted flight evaluations in an HA-420 Elite (Serial Number (S/N) 42000011) for Garmin 3000 software enhancements which primarily included automatic flight control system (AFCS) coupled go-around with underspeed protection (USP); AFCS electronic stability and protection (ESP) with roll and angle of attack (AOA) functions; and integrated Takeoff and Landing Data (TOLD) and performance (PERF) calculations. The HA-420 Elite model also included minor design changes in the fuel, electrical, and hydraulic systems. The aircraft, as well as the associated Airplane Flight Manual (AFM) change, was found to be operationally suitable. Training, checking, and currency requirements are listed in Appendix 3.

On November 16, 2022, the FSB conducted flight evaluations in an HA-420 Elite II (S/N 42000011) for the Augmented Nose Wheel Steering (NWS) System; the addition of Ground Spoilers; modified fuel system; avionics enhancements; cockpit and cabin enhancements; exterior lights consolidation; upgrades to Garmin Line Replaceable Units (LRU) due to obsolescence; GWX 8000 radar; datalink capabilities; clearance-based flight plan; increased weights; aft baggage capacity increase; expanded aft center of gravity (CG) envelope; stabilized approach alerting; updates to the TOLD; and emergency auto-brake provisions. Verified provisions for autothrottle and emergency land controls and switches were disabled and covered, along with corresponding circuit breakers being pulled and collared. The aircraft, as well as the associated AFM change, was found to be operationally suitable. Training, checking, and currency requirements are listed in Appendix 3.

On June 20, 2024, the FSB conducted flight evaluations in an HA-420 Elite II (S/N 42000011) for the optional autothrottle (AT). The aircraft, as well as the associated AFM change, was found to be operationally suitable. Training, checking, and currency requirements are listed in Appendix 3.

In November 2025, the FSB conducted an analysis of Service Bulletin (SB) upgrades available to the HA-420 APMG modification, HA-420 S/N 4200012 through 42000125 that have been upgraded with the APMG SB (SB-420-55-001). The voluntary upgrades have a marketing name HA-420 APMG S (SB-420-42-023). The upgrades have similar design features that are standard on the HA-420 Elite S model. The AFM for the HA-420 APMG S was found to be operationally suitable. Training, checking, and currency requirements are listed in Appendix 3.

## 5. ACRONYMS

- 14 CFR Title 14 of the Code of Federal Regulations
- AC Advisory Circular
- ACARS Aircraft Communications Addressing and Reporting System

• ACFT	Aircraft
• ACS	Airman Certification Standards
• AED	Aircraft Evaluation Division
• AFCS	Automatic Flight Control System
• AFM	Airplane Flight Manual
• AOA	Angle of Attack
• APMG	Advanced Performance Modification Group
• AT	Autothrottle
• ATP	Airline Transport Pilot
• AV	Audiovisual Presentation
• CAS	Crew Alert System
• CG	Center of Gravity
• CPT	Cockpit Procedures Trainer
• CRM	Crew Resource Management
• DCU	Data Concentrator Unit
• DLS-IR	Datalink Services Implementing Rule
• ECL	Electronic Checklist
• EDM	Emergency Descent Mode
• EFB	Electronic Flight Bag
• ENG AI	Engine Anti-Ice
• ESP	Electronic Stability and Protection
• FAA	Federal Aviation Administration
• FFS	Full Flight Simulator
• FMS	Flight Management System
• FSB	Flight Standardization Board
• FSTD	Flight Simulation Training Device
• FTD	Flight Training Device
• GTC	Garmin Touchscreen Controller
• HO	Handout
• ICBI	Interactive Computer-Based Instruction
• LRU	Line Replaceable Unit
• MCT	Maximum Continuous Thrust
• MDR	Master Differences Requirements
• MEL	Minimum Equipment List
• MFD	Multifunction Display
• MFF	Mixed Fleet Flying
• MMEL	Master Minimum Equipment List
• MLW	Maximum Landing Weight
• MRW	Maximum Ramp Weight
• MTOW	Maximum Takeoff Weight
• MZFW	Maximum Zero Fuel Weight
• NAS	National Airspace System
• NWS	Nose Wheel Steering
• OVERSPD	Overspeed

• PERF	Performance
• PFD	Primary Flight Display
• PIC	Pilot in Command
• PTT	Part Task Trainer
• QRH	Quick Reference Handbook
• SB	Service Bulletin
• SCU	Steering Control Unit
• SIC	Second in Command
• S/N	Serial Number
• SRM	Single-Pilot Resource Management
• SVS	Synthetic Vision System
• SU	Stand-Up Instruction
• TAWS	Terrain Awareness and Warning System
• TC	Type Certificate
• TCAS	Traffic Alert and Collision Avoidance System
• TCBI	Tutorial Computer-Based Instruction
• TCDS	Type Certificate Data Sheet
• TO	Takeoff
• TOLD	Takeoff and Landing Data
• TQA	Thrust Quadrant Assembly
• UNDRSPD	Underspeed
• USB	Universal Serial Bus
• USP	Underspeed Protection
• V <sub>1</sub>	Takeoff Decision Speed
• V <sub>REF</sub>	Reference Landing Speed
• VNAV	Vertical Navigation

## 6. DEFINITIONS

These definitions are for the purpose of this report only.

- 6.1 Base Aircraft.** An aircraft identified for use as a reference to compare differences with another aircraft.
- 6.2 Current.** A crewmember meets all requirements to operate the aircraft under the applicable operating part.
- 6.3 Differences Tables.** Describe the differences between a pair of related aircraft, and the minimum levels operators must use to conduct differences training and checking of flightcrew members. Differences levels range from A to E.
- 6.4 Master Differences Requirements (MDR).** Specifies the minimum levels of training and checking required between a pair of related aircraft, derived from the highest level in the Differences Tables.

- 6.5 Mixed Fleet Flying (MFF).** The operation of a base aircraft and one or more related aircraft for which credit may be taken for training, checking, and currency events.
- 6.6 Operational Evaluation.** The AED process to determine pilot type rating, minimum flightcrew member training, checking and currency requirements, and unique or special airman certification requirements (e.g., specific flight characteristics, no-flap landing).
- 6.7 Operational Suitability.** The AED determination that an aircraft or system may be used in the National Airspace System (NAS) and meets the applicable operational regulations (e.g., Title 14 of the Code of the Federal Regulations (14 CFR) parts 91, 121, 133, and 135).
- 6.8 Qualified.** A flightcrew member holds the appropriate airman certificate and ratings as required by the applicable operating part.
- 6.9 Related Aircraft.** Any two or more aircraft of the same make with either the same or different type certificates (TC) that have been demonstrated and determined by the Administrator to have commonality.
- 6.10 Seat-Dependent Tasks.** Maneuvers or procedures using controls that are accessible or operable from only one flightcrew member seat.
- 6.11 Special Emphasis Area.** A training requirement unique to the aircraft, based on a system, procedure, or maneuver, which requires additional highlighting during training. It may also require additional training time, specialized flight simulation training devices (FSTD), or training equipment.
- 6.12 Specific Flight Characteristic.** A maneuver or procedure with unique handling or performance characteristics that the FSB has determined must be checked.

## **7. PILOT TYPE RATING**

### **7.1 Type Rating.**

- 7.1.1 The HA-420 type rating designation is HA-420 and may be operated with or without a second in command (SIC) with certain limitations. The AFM lists equipment that must be operative to operate the aircraft single pilot.
- 7.1.2 An HA-420 pilot type rating may be issued with the limitation “HA-420 Second in Command Required” as applicable.

### **7.2 Common Type Ratings.** Not applicable.

### **7.3 Military Equivalent Designations.** Military aircraft that qualify for the HA-420 type rating can be found at [www.faa.gov](http://www.faa.gov) under “Pilots and Airmen,” “Airmen Certification,” “Quick Links,” “Pilot Certificate Aircraft Type Designations.” This webpage is kept up-to-date and can be found at: <https://registry.faa.gov/typeratings/>.

## **8. RELATED AIRCRAFT**

### **8.1 Related Aircraft on Same TCDS:**

- HA-420: S/N 42000012 thru 42000125.
- HA-420 Elite: S/N 42000012 thru 42000125 with SB-420-55-001 (APMG); S/N 42000126 thru 42000206.
- HA-420 APMG S: S/N 4200012 thru 42000125 with SB-420-42-023 (APMG S).
- HA-420 Elite S: S/N 42000126 thru 42000206 with SB-420-42-016 or SB-420-32-013, SB-420-42-018 and SB-420-11-001 installed; S/N 42000207 thru 42000234.
- HA-420 Elite II: S/N 42000235 and up.

### **8.2 Related Aircraft on Different TCDS. Not applicable.**

## **9. PILOT TRAINING**

### **9.1 Airman Experience.**

- 9.1.1 Airmen receiving HA-420 initial training will benefit from prior experience operating multi-engine turbojet aircraft. Additionally, a working knowledge of advanced aircraft systems, flight management systems (FMS) with electronic flight displays, and high-altitude operations is highly recommended. Pilots without this experience may require additional training.
- 9.1.2 Airmen receiving differences, upgrade, or transition training are assumed to have previous experience in a HA-420 series aircraft variation.

### **9.2 Special Emphasis Areas.**

- 9.2.1 Pilots must receive special emphasis on the following areas during initial, recurrent, requalification, and transition ground training:
  - a) Brake system. Brake antiskid logic.
  - b) Landing procedure outlining critical piloting techniques required in the Performance Introduction section of the AFM. Emphasis to fly reference landing speed ( $V_{REF}$ ) with no additives.
  - c) NWS. Nose wheel positioning and control logic at touchdown and rollout. Adverse interaction of asymmetrical braking with NWS.
  - d) Crosswind takeoff (TO) and landing. Unique limitations, cautions, warnings, and critical piloting techniques and procedures found in the AFM. Proper application of aircraft controls and hazards of incorrect aircraft controls application during two-engine and single-engine operations.



- e) Discuss what leads to yaw, divergence, and a loss of control about the vertical axis during rollout and how to quickly regain control (i.e., what control inputs improve stability and control during landing rollout and what inputs lead to divergence).
- f) Emergency descent mode.
- g) Traffic Alert and Collision Avoidance System (TCAS) and Terrain Awareness and Warning System (TAWS).
- h) Weather radar.
- i) Vertical navigation (VNAV) departure and arrival procedures.
- j) Operation with emergency power only.
- k) Emergency/abnormal quick reference handbook (QRH).
- l) Master Minimum Equipment List (MMEL)/minimum equipment list (MEL).
- m) Single-Pilot Resource Management (SRM) and/or Crew Resource Management (CRM).
- n) ECL.
- o) Synthetic Vision System (SVS) operation.
- p) Risk assessment and risk management.
- q) AT, if installed.

9.2.2 Pilots must receive special emphasis on and perform tasks related to the following areas during initial, recurrent, requalification, and transition flight training:

- a) Emergency descent mode.
- b) TCAS and TAWS.
- c) Weather radar.
- d) VNAV departure and arrival procedures.
- e) Emergency/abnormal QRH.
- f) SRM and/or CRM.
- g) ECL.
- h) SVS operation.

- i) AT, if installed.
- j) Landing procedure performed in accordance with the steps outlined in the Performance Introduction section of the AFM. Emphasis on flying  $V_{REF}$  with no additives.
- k) Crosswind TOs and landings. Adherence to cautions, warnings, and critical crosswind piloting techniques and procedures in the AFM (AFM limitations must not be exceeded). Including but not limited to:
  - Crosswind TOs and landings – two-engine and single-engine operations.
  - Crosswind rejected TO before takeoff decision speed ( $V_1$ ).
- l) Demonstrate (simulator only) what leads to yaw, divergence, and a loss of control about the vertical axis during rollout and how to quickly regain control (i.e., what control inputs improve stability and control during landing rollout and what inputs lead to divergence).

**NOTE:** When conducting crosswind training, the crosswind limitation and handling characteristics of the aircraft must be considered. Exposure to progressively increasing crosswind components should be weighed to ensure safe operation of the aircraft. Requirement for brake cooling during multiple TOs and landings should be emphasized.

9.2.3 Pilots must receive special emphasis on and perform tasks related to the following during initial flight training: Operation with emergency power only.

**9.3 Specific Flight Characteristics.** Maneuvers or procedures required to be checked as referenced in the Airline Transport Pilot (ATP) and Type Rating for Airplane Airman Certification Standards (ACS). There are no specific flight characteristics.

**9.4 Seat-Dependent Tasks.** There are no specific seat-dependent tasks. However, the minimum crew determination listed in the AFM and the TCDS is one pilot in the left seat. As such, the pilot must occupy the left pilot seat for all pilot-in-command (PIC) training as a single pilot.

**9.5 Regulatory Training Requirements Which Are Not Applicable to the HA-420.**  
Part 135 ground training: propellers.

**9.6 FSTDs.** There are no specific systems, procedures, or maneuvers that are unique to the HA-420 that require a specific FSTD for training.

**9.7 Training Equipment.** There are no specific systems or procedures that are unique to the HA-420 that require specific training equipment.

**9.8 Differences Training Between Related Aircraft.** Pilots must receive differences training between the HA-420 series aircraft variations as applicable to their operation. The level of training is specified in Appendix 3.

## 10. PILOT CHECKING

- 10.1 Landing from a No-Flap or Nonstandard Flap Approach.** The probability of flap extension failure on the HA-420 is not extremely remote due to system design. Therefore, demonstration of a no-flap approach and landing during pilot certification or a 14 CFR § 61.58 proficiency check, § 91.1065 competency check, or § 135.293 competency check is required. Refer to FAA Order 8900.1, Volume 5, Airman Certification, when the test or check is conducted in an aircraft versus a full flight simulator (FFS).
- 10.2 Specific Flight Characteristics.** Maneuvers or procedures required to be checked as referenced in the ATP and Type Rating for Airplane ACS. There are no specific flight characteristics.
- 10.3 Seat-Dependent Tasks.** There are no specific seat-dependent tasks. However, the minimum crew determination listed in the AFM and the TCDS is one pilot in the left seat. As such, the pilot must occupy the left pilot seat for all practical tests and proficiency checks as a single pilot.
- 10.4 Other Checking Items.** Not applicable.
- 10.5 FSTDs.** There are no specific systems, procedures, or maneuvers that are unique to the HA-420 that require a specific FSTD for checking.
- 10.6 Equipment.** There are no specific systems or procedures that are unique to the HA-420 that require specific equipment.
- 10.7 Differences Checking Between Related Aircraft.** Pilots must receive differences checking between HA-420 series aircraft variations as applicable to their operation. The level of checking is specified in Appendix 3.

## 11. PILOT CURRENCY

There are no additional currency requirements for the HA-420 other than those already specified in 14 CFR parts 61 and 135.

- 11.1 Differences Currency Between Related Aircraft.** Not applicable.

## 12. OPERATIONAL SUITABILITY

The HA-420 is operationally suitable for operations under 14 CFR parts 91, and 135. The FSB determined operational compliance by conducting an evaluation in October 2015. The list of operating rules evaluated is on file at the AED General Aviation Branch.

## 13. MISCELLANEOUS

- 13.1 Forward Observer Seat.** HA-420 aircraft are not equipped with a dedicated forward observer seat. The HA-420 right cockpit seat, installed in accordance with

TCDS No. A00018AT, has been evaluated and determined to meet requirements of 14 CFR § 135.75(b) for use by the Administrator during enroute inspections and for the administration of flight tests leading to pilot certification or operating privileges. The right cockpit seat is the primary seat in the HA-420 to meet the regulations cited above. However, if that seat is occupied (i.e., for two-pilot crew operations), the side-facing seat across from the forward entry door is acceptable for conducting enroute inspections and line checks only. This is the only configuration that has been evaluated by the FSB. The operator must provide a means for the inspector to monitor communications between the crew and those external to the aircraft.

**13.2 Aircraft Approach Category.** The HA-420 is considered Category B aircraft for the purpose of determining the appropriate instrument approach procedure category in accordance with 14 CFR § 97.3.

**13.3 Normal Landing Flaps.** The HA-420 normal “final flap setting” per 14 CFR § 91.126(c) is “LDG”.

**13.4 Electronic Flight Bag (EFB).**

13.4.1 The EFB evaluation determined chart display functions to be suitable as one source for electronic display of airport diagrams, approach plates, arrival procedures, and departure procedures. Since chart information cannot be displayed in the event of certain avionics failures, a suitable backup is required. Approved AFM provides operating limitations for the installation.

13.4.2 The G3000 includes “FliteChart” and optional “ChartView” electronic charts. A specific system description for the system configuration appropriate to the installation is available in the approved AFM and Garmin G3000 Integrated Avionics System Pilot’s Guide.

**13.5 Steep Approach.** Steep approach has not been evaluated by the FSB.

**13.6 ECL.** See Appendix 4, Electronic Checklist Evaluation.

## APPENDIX 1. DIFFERENCES LEGEND

**Training Differences Legend**

<b>Differences Level</b>	<b>Type</b>	<b>Training Method Examples</b>	<b>Conditions</b>
A	Self-Instruction	<ul style="list-style-type: none"> <li>• Operating manual revision (handout (HO))</li> <li>• Flightcrew operating bulletin (HO)</li> </ul>	<ul style="list-style-type: none"> <li>• Crew has already demonstrated understanding on base aircraft (e.g., updated version of engine).</li> <li>• Minor or no procedural changes required.</li> <li>• No safety impact if information is not reviewed or is forgotten (e.g., different engine vibration damping mount).</li> <li>• Once called to attention of crew, the difference is self-evident.</li> </ul>
B	Aided Instruction	<ul style="list-style-type: none"> <li>• Audiovisual presentation (AV)</li> <li>• Tutorial computer-based instruction (TCBI)</li> <li>• Stand-up instruction (SU)</li> </ul>	<ul style="list-style-type: none"> <li>• Systems are functionally similar.</li> <li>• Crew understanding required.</li> <li>• Issues need emphasis.</li> <li>• Standard methods of presentation required.</li> </ul>
C	Systems Devices	<ul style="list-style-type: none"> <li>• Interactive (full-task) computer-based instruction (ICBI)</li> <li>• Cockpit Procedures Trainers (CPT)</li> <li>• Part task trainers (PTT)</li> <li>• Level 4 or 5 flight training device (FTD 4-5)</li> </ul>	<ul style="list-style-type: none"> <li>• Training can only be accomplished through systems training devices.</li> <li>• Training objectives focus on mastering individual systems, procedures, or tasks versus highly integrated flight operations or “real-time” operations.</li> <li>• Training devices are required to assure attainment or retention of crew skills to accomplish more complex tasks usually related to aircraft systems.</li> </ul>
D	Maneuvers Devices	<ul style="list-style-type: none"> <li>• Level 6 or 7 flight training device (FTD 6-7)</li> <li>• Level A or B full flight simulator (FFS A-B)</li> </ul>	<ul style="list-style-type: none"> <li>• Training can only be accomplished in flight maneuver devices in a real-time environment.</li> <li>• Training requires mastery of interrelated skills versus individual skills.</li> <li>• Motion, visual, control-loading, and specific environmental conditions may be required.</li> </ul>
E	Level C/D FFS or Aircraft	<ul style="list-style-type: none"> <li>• Level C or D full flight simulator (FFS C-D)</li> <li>• Aircraft (ACFT)</li> </ul>	<ul style="list-style-type: none"> <li>• Motion, visual, control-loading, audio, and specific environmental conditions are required.</li> <li>• Significant full-task differences that require a high-fidelity environment.</li> <li>• Usually correlates with significant differences in handling qualities.</li> </ul>

### Checking Differences Legend

<b>Differences Level</b>	<b>Checking Method Examples</b>	<b>Conditions</b>
A	None	None
B	<ul style="list-style-type: none"> <li>• Oral or written exam</li> <li>• Tutorial computer-based instruction (TCBI) self-test</li> </ul>	Individual systems or related groups of systems.
C	<ul style="list-style-type: none"> <li>• Interactive (full-task) computer-based instruction (ICBI)</li> <li>• Cockpit Procedures Trainers (CPT)</li> <li>• Part task trainers (PTT)</li> <li>• Level 4 or 5 flight training device (FTD 4-5)</li> </ul>	<ul style="list-style-type: none"> <li>• Checking can only be accomplished using systems devices.</li> <li>• Checking objectives focus on mastering individual systems, procedures, or tasks.</li> </ul>
D	<ul style="list-style-type: none"> <li>• Level 6 or 7 flight training device (FTD 6-7)</li> <li>• Level A or B full flight simulator (FFS A-B)</li> </ul>	<ul style="list-style-type: none"> <li>• Checking can only be accomplished in flight maneuver devices in a real-time environment.</li> <li>• Checking requires mastery of interrelated skills versus individual skills.</li> <li>• Motion, visual, control-loading, and specific environmental conditions may be required.</li> </ul>
E	<ul style="list-style-type: none"> <li>• Level C or D full flight simulator (FFS C-D)</li> <li>• Aircraft (ACFT)</li> </ul>	Significant full-task differences that require a high-fidelity environment.

## APPENDIX 2. MASTER DIFFERENCES REQUIREMENTS (MDR) TABLE

These are the minimum levels of training and checking required, derived from the highest level in the Differences Tables in Appendix 3. Differences levels are arranged as training/checking.

<b>To Related Aircraft ↓</b>	<b>From Base Aircraft →</b>	<b>HA-420</b>	<b>HA-420 Elite including Advanced Performance Modification Group (APMG)</b>	<b>HA-420 Elite S</b>	<b>HA-420 Elite II</b>
HA-420		Not applicable	B/B	Not evaluated	Not evaluated
HA-420 Elite		C/B	Not applicable	Not evaluated	D/B
HA-420 APMG S		Not evaluated	B/B	B/A	Not evaluated
HA-420 Elite II		Not evaluated	B/B**	Not evaluated	Not applicable
HA-420 Elite II with Autothrottle (AT)		Not evaluated	D/D	Not evaluated	D/D

\*\*Elite S differences which include Augmented Nose Wheel Steering (NWS) System, increased weights, minor avionics enhancements, Takeoff and Landing Data (TOLD) updates, datalink, and associated flight manual were evaluated with Training/Checking established at Level B/B.

### APPENDIX 3. DIFFERENCES TABLES

This Design Differences Table, from the HA-420 to the HA-420 Elite, was proposed by Honda Aircraft and validated by the Flight Standardization Board (FSB) on May 17, 2018. It lists the minimum differences levels operators must use to conduct differences training and checking of flightcrew members. Design Difference Table was updated November 2025 to capture Advanced Performance Modification Group (APMG) differences.

**NOTE:** Optional equipment is delineated with a double asterisk \*\*. Training and checking is not required if equipment is not installed on the operator's aircraft.

FROM BASE AIRCRAFT: HA-420	DESIGN	REMARKS	FLT CHAR	PROC CHNG	TRAINING	CHECKING
TO RELATED AIRCRAFT: HA-420 Elite including APMG Differences						
	Limitations	Increased maximum takeoff weight (MTOW) by 100 lb. Weight limit increase for fuel and baggage.  Center of gravity (CG) envelope expansion.	No	Yes	B	B
	Performance	Revised takeoff (TO) performance information.	No	No	A	A
	Performance	Integrated Takeoff and Landing Data (TOLD) and performance (PERF) calculation.	No	Yes	B	B



FROM BASE AIRCRAFT: HA-420	DESIGN	REMARKS	FLT CHAR	PROC CHNG	TRAINING	CHECKING
TO RELATED AIRCRAFT: HA-420 Elite including APMG Differences						
	ATA 22 Autoflight	HA-420 Elite only: **Electronic stability and protection (ESP).  **Coupled go-around with underspeed protection (USP).	No	Yes	C	B
	Dimensions	Horizontal stabilizer is 6 in. longer.	No	No	A	A
	Indication	Revised Crew Alert System (CAS) logic. CAS advisory “CONFIG TAKEOFF DATA” message logic based on Service Bulletin (SB) installed.  HA-420 Elite only: CAS message added for new functionality of the ESP and for the fuel system.	No	Yes	B	B
	Indication	The new software includes a pilot-selectable angle of attack (AOA) indicator situated on the primary flight display (PFD) below the airspeed tape.	No	No	A	A

FROM BASE AIRCRAFT: HA-420	DESIGN	REMARKS	FLT CHAR	PROC CHNG	TRAINING	CHECKING
TO RELATED AIRCRAFT: HA-420 Elite including APMG Differences						
	ATA 24 Electrical Power	<p>The No. 1 (system) battery was changed from 28Ah to 17Ah, Universal Serial Bus (USB) charging ports added at each pilot station and each club seat, and power feeds were added to accommodate new galley and future cabin systems.</p> <p>APMG Model was not modified with the changes.</p>	No	No	B	A
	ATA 28 Fuel	<p>Increase in fuel capacity.</p> <p>Remove outside fueling gage and added "Fuel Slowly" indication light.</p> <p>APMG Model fuel system was not modified.</p>	No	Yes	B	A

FROM BASE AIRCRAFT: HA-420	DESIGN	REMARKS	FLT CHAR	PROC CHNG	TRAINING	CHECKING
TO RELATED AIRCRAFT: HA-420 Elite including APMG Differences						
	ATA 29 Hydraulic Power	Volume compensator was installed in the master cylinder command lines, and brake shutoff valve modified to prevent pilot-commanded brake applications during gear retraction.  This improves brake feel during initial application. There is no change to braking performance.	No	No	B	A
	ATA 30 Ice and Rain Protection	Wing anti-ice bleed air crossflow valve was replaced with a duct.	No	No	B	A

This Maneuver Differences Table, from the HA-420 to the HA-420 Elite, was proposed by Honda Aircraft and validated by the FSB on May 17, 2018. It lists the minimum differences levels operators must use to conduct differences training and checking of flightcrew members. October 2025, APMG differences included.

<b>FROM BASE AIRCRAFT: HA-420</b>						
<b>TO RELATED AIRCRAFT: HA-420 Elite including APMG Differences</b>	<b>MANEUVER</b>	<b>REMARKS</b>	<b>FLT CHAR</b>	<b>PROC CHNG</b>	<b>TRAINING</b>	<b>CHECKING</b>
	Preflight Inspection	Changes in horizontal tail, elevator, removal of wingtip triangles.  APMG model retains HA-420 refueling system.	No	No	A	A
	Cockpit Preparation	Integrated TOLD and PERF calculation.	No	Yes	B	B
	Navigation-Approach	Added visual approach as a selection in the Garmin 3000 database.	No	Yes	B	A
	Approach	HA-420 Elite only: **Coupled go-around with USP.	No	Yes	C	B
	All Phases of Flight	HA-420 Elite only: **automatic flight control system (AFCS) protection modes USP and ESP.	No	Yes	C	B

This Design Differences Table, from the HA-420 Elite to the HA-420, was proposed by Honda Aircraft and validated by the FSB on May 17, 2018. It lists the minimum differences levels operators must use to conduct differences training and checking of flightcrew members.

<b>FROM BASE AIRCRAFT: HA-420 Elite  TO RELATED AIRCRAFT: HA-420</b>	<b>DESIGN</b>	<b>REMARKS</b>	<b>FLT CHAR</b>	<b>PROC CHNG</b>	<b>TRAINING</b>	<b>CHECKING</b>
	Limitations	Decreased MTOW by 100 lb. Weight limit decrease for fuel and baggage.  CG envelope change.	No	Yes	B	B
	Performance	Revised TO performance information.	No	Yes	A	A
	Performance	**Integrated TOLD and PERF calculation is optional.	No	Yes	B	B
	ATA 22 Autoflight	**AFCS coupled go-around, USP, and ESP not available.	No	Yes	B	A
	Dimensions	Horizontal stabilizer is 6 in. shorter.	No	No	A	A
	Indication	Revised CAS logic. Removed CAS messages for functionality with TOLD and ESP, and for the fuel system.	No	Yes	B	B
	Indication	Pilot-selectable AOA indicator not available.	No	No	A	A

FROM BASE AIRCRAFT: HA-420 Elite  TO RELATED AIRCRAFT: HA-420	DESIGN	REMARKS	FLT CHAR	PROC CHNG	TRAINING	CHECKING
	ATA 24 Electrical Power	The No. 1 (system) battery was changed from 17Ah to 28Ah. USB charging ports not installed. Power feeds not installed. New galley and future cabin systems not available.	No	No	B	A
	ATA 28 Fuel	Decrease in fuel capacity.  “Fuel Slowly” indication light is not installed.	No	Yes	B	A
	ATA 29 Hydraulic Power	Volume compensator not installed in the master cylinder command lines, and brake shutoff valve not modified to prevent pilot-commanded brake applications during gear retraction.  This brake feel during initial application is not improved. There is no change to braking performance.	No	No	B	A
	ATA 30 Ice and Rain Protection	Wing anti-ice bleed air crossflow valve is used.	No	No	A	A

This Maneuver Differences Table, from the HA-420 Elite to the HA-420, was proposed by Honda Aircraft and validated by the FSB on May 17, 2018. It lists the minimum differences levels operators must use to conduct differences training and checking of flightcrew members.

<b>FROM BASE AIRCRAFT: HA-420 Elite  TO RELATED AIRCRAFT: HA-420</b>	<b>MANEUVER</b>	<b>REMARKS</b>	<b>FLT CHAR</b>	<b>PROC CHNG</b>	<b>TRAINING</b>	<b>CHECKING</b>
	Preflight Inspection	Changes in horizontal tail, elevator. Wingtip triangles installed.	No	No	A	A
	Cockpit Preparation	**Integrated TOLD and PERF calculation is optional.	No	Yes	B	B
	Navigation Approach	Visual approach as a selection in the Garmin 3000 database is not available.	No	Yes	B	A
	Approach	**Coupled go-around not installed.	No	Yes	B	A
	All Phases of Flight	**AFCS protection modes, USP, and ESP not installed	No	Yes	B	A

This Design Differences Table, from the HA-420 Elite to the HA-420 Elite II (and Elite S differences), was proposed by Honda Aircraft Company and validated by the FSB on November 16, 2022. It lists the minimum differences levels operators must use to conduct differences training and checking of flightcrew members. On June 20, 2024, FSB validated the optional autothrottle (AT) for Elite II aircraft. The AT design differences are added to the table. November 2025, revised training and checking differences in ATA 22 Autoflight.

FROM BASE AIRCRAFT: HA-420 Elite	DESIGN	REMARKS	FLT CHAR	PROC CHNG	TRAINING	CHECKING
TO RELATED AIRCRAFT: HA-420 Elite II	Limitations	<p><b>Elite II</b> Weight limits changed. - MTOW 11,100 lb. - Maximum landing weight (MLW) 10,360 lb. - Maximum Zero Fuel Weight (MZFW) 9,300 lb. - Maximum aft baggage compartment 550 lb.</p> <p>Aft CG envelope expansion limit at 34%.</p> <p><b>Elite S</b> Weight limits changed. - MTOW 10,900 lb. - MLW 10,160 lb. - MZFW 9,100 lb.</p>	No	Yes	B	B



FROM BASE AIRCRAFT: HA-420 Elite  TO RELATED AIRCRAFT: HA-420 Elite II	DESIGN	REMARKS	FLT CHAR	PROC CHNG	TRAINING	CHECKING
	Limitations	<b>Elite II and Elite S</b> - Crosswind limitation changed to demonstrated crosswind. - Expanded engine crosswind envelope.	No	Yes	B	B
	Performance	<b>Elite II and Elite S</b> Revised TO performance information.	No	No	B	A
	Performance	<b>Elite II and Elite S</b> - New brake energy limit tables added to AFM. - New brake cooling turnaround charts added to AFM.	No	Yes	B	B

FROM BASE AIRCRAFT: HA-420 Elite	DESIGN	REMARKS	FLT CHAR	PROC CHNG	TRAINING	CHECKING
TO RELATED AIRCRAFT: HA-420 Elite II	Performance	<p><b>Elite II</b> Integrated TOLD and PERF calculation.  - Updated to new weights/spoilers.  - Corrected erroneous reference landing speed (<math>V_{REF}</math>) data.  - Revised TO trim bands.  - Crosswind alert.  - Engine Anti-Ice (ENG AI) only landing data.</p> <p><b>Elite S</b> Integrated TOLD and PERF calculation.  - Updated to new weights.  - Corrected erroneous <math>V_{REF}</math> issue.  - Revised TO trim bands.  - Crosswind alert.</p>	No	Yes	B	B

FROM BASE AIRCRAFT: HA-420 Elite  TO RELATED AIRCRAFT: HA-420 Elite II	DESIGN	REMARKS	FLT CHAR	PROC CHNG	TRAINING	CHECKING
	Avionics Enhancements	<b>Elite II</b> - Vertical navigation (VNAV) improvement. - Pitch roll indications fuel synoptic. - Aircraft cycles display. - Pilot modifiable gear and flap speed targets.  <b>Elite S</b> - VNAV improvement. - Pitch roll indications fuel synoptic. - Aircraft cycles display.	No	No	B	A
	Garmin Line Replaceable Unit (LRU) Obsolescence	- GWX 70 to GWX 75. - GMU 44 to GMU 44B. - GTX 33D to GTX 335D. - GSD 41 to GSD 41B. - GDL 69A to GDL 69 SXM. - GIA 64E-40 to GIA 64E-41.	No	No	A	A
	Flight Path Angle Reference Line	Available with Synthetic Vision System (SVS) option.	No	No	A	A
	Stabilized Approach Alerting	- Speed deviation. - Baro set deviation. - Lateral deviation. - Vertical deviation.	No	No	B	B

FROM BASE AIRCRAFT: HA-420 Elite	DESIGN	REMARKS	FLT CHAR	PROC CHNG	TRAINING	CHECKING
TO RELATED AIRCRAFT: HA-420 Elite II						
	ATA 22 Autoflight	<u>AT Hardware (if installed):</u> - AT Thrust Quadrant Assembly (TQA) (including AT disconnects), maximum continuous thrust (MCT) detent removed. - New AFCS controller panel. - Circuit breaker.	No	Yes	B	A
	ATA 22 Autoflight	<u>AT Functionality (if installed):</u> - Annunciations, AT THR LIM, normal and abnormal disconnects. - Modes, TO, TO HOLD, CLIMB, DESC, IDLE, SPEED, RETARD. - CAS messages and PFD flags (AT FAULT, AT FAIL, RA FAIL).	No	Yes	D	D
	ATA 22 Autoflight	<u>AT Functionality (if installed):</u> - Automatic speed protection, overspeed (OVERSPD)/underspeed (UNDRSPD). - Emergency Descent Mode (EDM).	No	Yes	D	B

FROM BASE AIRCRAFT: HA-420 Elite	DESIGN	REMARKS	FLT CHAR	PROC CHNG	TRAINING	CHECKING
TO RELATED AIRCRAFT: HA-420 Elite II						
	ATA 22 Autoflight	AT (not installed) provisions: - AT TQA. - Controls disabled and covered. - MCT detent removed and increased friction. - Circuit breaker pulled and collared.	No	Yes	B	A
	ATA 23 Communications	<b>Elite II and Elite S</b> Datalink. - Federal Aviation Administration (FAA) Data Communication Program (DataComm). - Aircraft Communications Addressing and Reporting System (ACARS). - COM 3 functionality. - Same hardware as Datalink Services Implementing Rule (DLS-IR).	No	Yes	B	A
	ATA 23 Communications	Cabin audio briefer – customizable.	No	No	A	A
	ATA 23 Communications	Cockpit-powered headset plugs added.	No	No	A	A
	ATA 27 Flight Controls	Ground spoilers - fully automatic.	Yes	Yes	B	B

FROM BASE AIRCRAFT: HA-420 Elite	DESIGN	REMARKS	FLT CHAR	PROC CHNG	TRAINING	CHECKING
TO RELATED AIRCRAFT: HA-420 Elite II						
	ATA 28 Fuel	<ul style="list-style-type: none"> <li>- Increase in fuel capacity by increasing size of fuselage tank.</li> <li>- Modified fuel filler port.</li> <li>- Modified venting system.</li> <li>- Additional fuel probe in fuselage tank.</li> <li>- Optical level sensor replaces vent float switch.</li> <li>- Fuel vent diverter strips.</li> </ul> Removed “Fuel Slowly” indication light.	No	Yes	B	B
	ATA 32 Landing Gear	<b>Elite II and Elite S</b> Augmented Nose Wheel Steering (NWS) system. <ul style="list-style-type: none"> <li>- Updated Garmin Data Concentrator Unit (DCU) from GSD 41 to GSD 41B.</li> <li>- Steering Control Unit (SCU) replaced with GAC 9200 unit.</li> <li>- Damps yaw disturbances.</li> <li>- Relaxed gains at taxi speeds.</li> <li>- Modified wake-up curve.</li> </ul>	Yes	Yes	B	B
	ATA 32 Landing Gear	Emergency auto-brake used for de-spin braking (S/N 42000240 and up).	No	No	A	A

FROM BASE AIRCRAFT: HA-420 Elite	DESIGN	REMARKS	FLT CHAR	PROC CHNG	TRAINING	CHECKING
TO RELATED AIRCRAFT: HA-420 Elite II						
	ATA 33 Lighting	Exterior lights consolidation, integrated belly light containing landing/taxi/recognition lights.	No	No	B	B
	ATA 33 Lighting	Cabin light enhancements. - Night light (blue). - Main entry door step light.	No	No	A	A
	ATA 34 Navigation	Clearance-based flight plans allow latitude (LAT)/longitude (LON) waypoints, place/bearing/distance waypoints, place/bearing/place/bearing waypoints, airway routes, airway selection, and Airway-to-airway selection.	No	No	A	A
	ATA 34 Navigation	GWX 8000 Weather Radar function. - Auto scan mode. - Turbulence detection. - Zero blind range. - Lightning/hail prediction.	No	No	B	A
	Emergency Autoland Provisions	- Manual activation switch disabled and covered. - Circuit breaker pulled and collared.	No	No	B	A

This Maneuver Differences Table, from the HA-420 Elite to the HA-420 Elite II (and Elite S differences), was proposed by Honda Aircraft Company and validated by the FSB on November 15-16, 2022. It lists the minimum differences levels operators must use to conduct differences training and checking of flightcrew members. On June 20, 2024, FSB validated the optional AT for Elite II aircraft. The AT maneuver differences are added to the table.

<b>FROM BASE AIRCRAFT: HA-420 Elite  TO RELATED AIRCRAFT: HA-420 Elite II</b>	<b>MANEUVER</b>	<b>REMARKS</b>	<b>FLT CHAR</b>	<b>PROC CHNG</b>	<b>TRAINING</b>	<b>CHECKING</b>
	Preflight Inspection	<ul style="list-style-type: none"> <li>- Relocation of fuel filler port.</li> <li>- Removal of “Fuel Slowly” indication light.</li> <li>- Addition of fuel diverter strips.</li> <li>- Addition of integrated belly lights.</li> <li>- Removed wing taxi and recognition lights.</li> <li>- Wingtip triangles.</li> </ul>	No	Yes	A	A
	Cockpit Preparation	Integrated TOLD and PERF calculation.	No	Yes	B	B
	AT (If Installed)	Operation of the AT functions/modes with VNAV functionality integrated into maneuvers.	No	Yes	D	D



This Design Differences Table, from the HA-420 Elite II (and Elite S differences) to the HA-420 Elite, was proposed by Honda Aircraft Company and validated by the FSB on November 16, 2022. It lists the minimum differences levels operators must use to conduct differences training and checking of flightcrew members.

<b>FROM BASE AIRCRAFT: HA-420 Elite II</b>	<b>DESIGN</b>	<b>REMARKS</b>	<b>FLT CHAR</b>	<b>PROC CHNG</b>	<b>TRAINING</b>	<b>CHECKING</b>
<b>TO RELATED AIRCRAFT: HA-420 Elite</b>						
	Limitations	Weight limits changed. - MTOW 10,700 lb. - MLW 9,960 lb. - MZFW 8,900 lb. - Max aft baggage 400 lb.  Aft CG envelope limit reduced to 32.5%.	No	Yes	B	B
	Limitations	- Demonstrated crosswind changed to crosswind limitation. - Reduced engine crosswind envelope.	No	Yes	B	B
	Performance	Revised TO performance information.	No	Yes	A	A
	Performance	- Brake energy limit tables not included in AFM. - Brake cooling turnaround charts not included in AFM.	No	Yes	B	B

FROM BASE AIRCRAFT: HA-420 Elite II	DESIGN	REMARKS	FLT CHAR	PROC CHNG	TRAINING	CHECKING
TO RELATED AIRCRAFT: HA-420 Elite						
	Performance	<ul style="list-style-type: none"> <li>- Integrated TOLD and PERF calculation.</li> <li>- Updated weights.</li> <li>- Revised TO trim band.</li> <li>- No crosswind alert.</li> <li>- No ENG AI only landing data.</li> <li>- Erroneous V<sub>REF</sub> issue.</li> </ul>	No	Yes	B	B
	Avionics Changes	<ul style="list-style-type: none"> <li>- VNAV less capable.</li> <li>- No pitch roll indications on fuel synoptic.</li> <li>- No aircraft cycles display.</li> <li>- Gear and flap speed targets not modifiable.</li> </ul>	No	No	B	A
	Garmin LRUs	<ul style="list-style-type: none"> <li>- GWX 70.</li> <li>- GMU 44.</li> <li>- GTX 33D.</li> <li>- GSD 41.</li> <li>- GDL 69A.</li> <li>- GIA 64E-40.</li> </ul>	No	No	A	A
	Stabilized Approach Alerting	Not installed.	No	No	A	A
	ATA 23 Communications	Datalink – not installed.	No	No	A	A
	ATA 23 Communications	Cabin audio briefers – not installed.	No	No	A	A

FROM BASE AIRCRAFT: HA-420 Elite II	DESIGN	REMARKS	FLT CHAR	PROC CHNG	TRAINING	CHECKING
TO RELATED AIRCRAFT: HA-420 Elite						
	ATA 23 Communications	Cockpit-powered headset plugs not installed.	No	No	A	A
	ATA 27 Flight Controls	Ground Spoilers – not installed.	Yes	Yes	B	B
	ATA 28 Fuel	<ul style="list-style-type: none"> <li>- Decrease in fuel capacity.</li> <li>- Modified fuel filler port.</li> <li>- Modified venting system.</li> <li>- Removed one fuel probe in fuselage tank.</li> <li>- Vent float switch replaces optical level sensor.</li> <li>- Fuel vent diverter strips not installed.</li> <li>- “Fuel Slowly” indication light installed.</li> </ul>	No	Yes	B	B
	ATA 32 Landing Gear	<ul style="list-style-type: none"> <li>- Augmented NWS System.</li> <li>- Downgraded Garmin DCU from GSD 41B to GSD 41.</li> <li>- SCU replaced.</li> <li>- Greater yaw disturbances.</li> <li>- Increased gains at taxi speeds.</li> <li>- Modified wake-up curve.</li> </ul>	Yes	Yes	D	B
	ATA 32 Landing Gear	Emergency auto-brake not used for de-spin braking (S/N 42000239 and below).	No	No	A	A

<b>FROM BASE AIRCRAFT: HA-420 Elite II</b>	<b>DESIGN</b>	<b>REMARKS</b>	<b>FLT CHAR</b>	<b>PROC CHNG</b>	<b>TRAINING</b>	<b>CHECKING</b>
<b>TO RELATED AIRCRAFT: HA-420 Elite</b>						
	ATA 33 Lighting	Exterior lights relocated from Integrated belly light.	No	No	B	B
	ATA 33 Lighting	- Cabin light. - Main entry door step light not installed. - Night light (blue) not installed.	No	No	A	A
	ATA 34 Navigation	Clearance-based flight plans not available.	No	No	A	A
	ATA 34 Navigation	GWX 8000 weather radar function not available.	No	No	B	A
	AT Provisions	Not installed.	No	No	A	A
	Emergency Autoland Provisions	Not installed.	No	No	A	A

This Maneuver Differences Table, from the HA-420 Elite II to the HA-420 Elite, was proposed by Honda Aircraft Company and validated by the FSB on November 15-16, 2022. It lists the minimum differences levels operators must use to conduct differences training and checking of flightcrew members.

<b>FROM BASE AIRCRAFT: HA-420 Elite II</b>	<b>MANEUVER</b>	<b>REMARKS</b>	<b>FLT CHAR</b>	<b>PROC CHNG</b>	<b>TRAINING</b>	<b>CHECKING</b>
<b>TO RELATED AIRCRAFT: HA-420 Elite</b>						
	Preflight Inspection	<ul style="list-style-type: none"> <li>- Relocation of fuel filler port.</li> <li>- “Fuel Slowly” indication light installed.</li> <li>- Wing taxi and recognition Lights relocated from Integrated belly lights to wing tips.</li> <li>- Wingtip triangles not installed.</li> <li>- Fuel vent diverter strips not installed.</li> </ul>	No	No	A	A
	Cockpit Preparation	Integrated TOLD and PERF calculation.	No	Yes	B	B
	Taxi Normal and Crosswind TOs and Landings	Augmented NWS system.	Yes	Yes	D	B

This Design Differences Table, from the HA-420 Elite to the HA-420 APMG S, was proposed by Honda Aircraft Company. The FSB conducted an analysis in November 2025. It lists the minimum differences levels operators must use to conduct differences training and checking of flightcrew members.

<b>FROM BASE AIRCRAFT: HA-420 Elite</b>						
<b>TO RELATED AIRCRAFT: HA-420 APMG S</b>	<b>DESIGN</b>	<b>REMARKS</b>	<b>FLT CHAR</b>	<b>PROC CHNG</b>	<b>TRAINING</b>	<b>CHECKING</b>
	Limitations	Weight limits changed. - Maximum ramp weight (MRW) 10,980 lb. - MTOW 10,900 lb. - MLW 10,160 lb. - MZFW 9,100 lb.	No	Yes	B	B
	Limitations	- Crosswind limitation changed to demonstrated crosswind. - Expanded engine crosswind envelope.	No	Yes	B	B
	Performance	Revised TO performance information.	No	No	B	A
	Performance	- New brake energy limit tables added to AFM. - New brake cooling turnaround charts added to AFM.	No	Yes	B	B
	Performance	Integrated TOLD and PERF calculation. - Updated to new weights. - Corrected erroneous V <sub>REF</sub> issue. - Crosswind alert. - Steep Approach not available.	No	Yes	B	B

FROM BASE AIRCRAFT: HA-420 Elite  TO RELATED AIRCRAFT: HA-420 APMG S	DESIGN	REMARKS	FLT CHAR	PROC CHNG	TRAINING	CHECKING
	Avionics Enhancements	- VNAV improvement. - Pitch roll indications fuel synoptic. - Aircraft cycles display. - Revised pitch target for all engine operative flap up TO to 14.0 degrees for the APMG S. (15.0 degrees for Elite).	No	No	B	A
	Garmin LRU Obsolescence	- GSD 41 to GSD 41B. - GIA 64E-40 to GIA 64E-41.	No	No	A	A
	Flight Path Angle Reference Line	Available with SVS option.	No	No	A	A
	ATA 23 Communications	Datalink. - FAA DataComm. - ACARS. - COM 3 functionality. Note: Link 2000 is still available with ACARS, but Link 2000 is not compatible with DataComm.	No	Yes	B	A

FROM BASE AIRCRAFT: HA-420 Elite	DESIGN	REMARKS	FLT CHAR	PROC CHNG	TRAINING	CHECKING
TO RELATED AIRCRAFT: HA-420 APMG S						
	ATA 28 Fuel	<ul style="list-style-type: none"> <li>- Decreased fuel capacity compared to Elite aircraft model.</li> <li>- Modified fuel filler port.</li> <li>- Modified venting system.</li> <li>- Optical level sensor replaces vent float switch.</li> <li>- Removed “Fuel Slowly” indication light.</li> </ul>	No	Yes	B	B
	ATA 30 Ice and Rain Protection	Wing anti-ice bleed air crossflow valve is used compared to a duct.	No	No	B	A
	ATA 32 Landing Gear	Augmented NWS System. <ul style="list-style-type: none"> <li>- Updated Garmin DCU from GSD 41 to GSD 41B.</li> <li>- SCU replaced with GAC9200 unit.</li> <li>- Damps yaw disturbances.</li> <li>- Relaxed gains at taxi speeds.</li> <li>- Modified wake-up curve.</li> </ul>	Yes	Yes	B	B



FROM BASE AIRCRAFT: HA-420 Elite	DESIGN	REMARKS	FLT CHAR	PROC CHNG	TRAINING	CHECKING
TO RELATED AIRCRAFT: HA-420 APMG S						
	ATA 75 Bleed Air	Bleed Air Leak Detection: APMG S uses two sensor loops for the respective left and right bleed air ducts between the horizontal firewall and flow control shutoff valves, compared to one sensor loop for left/right flow control shutoff valve zones and nacelle pressure-regulating shutoff valve zones.	No	No	B	A

This Design Differences Table, from the HA-420 Elite S to the HA-420 APMG S was proposed by Honda Aircraft Company. The FSB conducted an analysis in November 2025. It lists the minimum differences levels operators must use to conduct differences training and checking of flightcrew members.

FROM BASE AIRCRAFT: HA-420 Elite S	DESIGN	REMARKS	FLT CHAR	PROC CHNG	TRAINING	CHECKING
TO RELATED AIRCRAFT: HA-420 APMG S	ATA 28 Fuel	<p>APMG-S does not modify the HA-420 APMG fuel system.</p> <p>Compared to HA-420 Elite S:</p> <ul style="list-style-type: none"> <li>- Decreased fuel capacity (absence an auxiliary fuel tank).</li> <li>-Relocated filler port, no “FUEL SLOWLY” indication switch is installed adjacent to the fuel filler port) and no modified fuselage tank vent system that adds a small vent tube from the top of the L and R side bladder tanks.</li> <li>-Optical Fuel level Sensors, one on each wing in the APMG S configuration.</li> </ul>	No	Yes	B	A

FROM BASE AIRCRAFT: HA-420 Elite S  TO RELATED AIRCRAFT: HA-420 APMG S	DESIGN	REMARKS	FLT CHAR	PROC CHNG	TRAINING	CHECKING
	ATA 28 Fuel	<p>Certain HA-420 APMG S CAS messages are implemented to the Elite S AFM:</p> <ul style="list-style-type: none"> <li>-Added L Fuel Low Level Sensor to INOPERATIVE equipment with Battery Bus 1.</li> <li>-Added R Fuel Low Level Sensor to INOPERATIVE equipment with Battery Bus 2.</li> <li>-Added FUEL QTY FAULT (42000012 Thru 42000125) Abnormal procedure.</li> <li>-Added L-R FUEL QTY LOW (42000012 Thru 42000125) L(R) FUEL QTY LOW (42000012 Thru 42000125) Abnormal procedure.</li> </ul>	No	Yes	B	A

FROM BASE AIRCRAFT: HA-420 Elite S	DESIGN	REMARKS	FLT CHAR	PROC CHNG	TRAINING	CHECKING
TO RELATED AIRCRAFT: HA-420 APMG S						
	ATA 75 Bleed Air	<p>Bleed Air Leak Detection - (SN 42000012 – 42000125) uses two (2) sensor loops for the respective left and right bleed air duct between the horizontal firewall and flow control shutoff valves.</p> <p>Wing anti-ice bleed air crossflow valve is used compared to a duct.</p> <p>Certain HA-420 APMG S CAS messages are implemented to the Elite S AFM: Added Wing Crossflow (Ind) to INOPERATIVE equipment with Data Acquisition Unit 2 failure.</p>	No	No	A	A

## **APPENDIX 4. ELECTRONIC CHECKLIST EVALUATION**

The electronic checklist (ECL) was evaluated after the completion of the formal Flight Standardization Board (FSB). The evaluation was completed in March of 2016 at the Honda Aircraft Facility in Greensboro, NC.

Checklists can be displayed on any display pane of the primary flight displays (PFD) or multifunction display (MFD), and checklist items can be selected/deselected. Selection of checklist items or checklist section can be accomplished using the Garmin Touchscreen Controller (GTC) or by a scroll wheel control on each yoke. The CHECKLIST control is an up/down scroll wheel switch with detents and a momentary push-action. Pushing the wheel displays the checklist on the on-side PFD pane. Rotating the scroll wheel moves a selection box up/down on the display.

A paper/hard copy of the Honda Aircraft HA-420 normal procedures and emergency/abnormal procedures quick reference handbook (QRH) must be readily available during flight operations as a means of backup in case of ECL/MFD failure.

This checklist system was found to be operationally suitable for all flight operations by the Aircraft Evaluation Division (AED) General Aviation Branch.