Dassault Aviation

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Approved by SEA-AEG
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2. INTRODUCTION

Aircraft Evaluation Groups (AEG) are 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

- EASy II added.
- Master Differences Requirements (MDR) tables added.
- Reference to Electronic Flight Bag (EFB) Operational Suitability Report (OSR) added.
- Head-Up Display (HUD) training requirements revised.
- Enhanced Flight Vision System (EFVS) simulator training requirements revised.
- FalconEye (Head-Up Display (HUD)/Synthetic Vision System (SVS)/Enhanced Vision System (EVS)/Combined Vision System (CVS)) system training requirements added.
- Special Authorization (SA) Category (CAT) I and SA CAT II added.

Administrative editing throughout document for clarification, FAA writing guidelines, and revised Flight Standardization Board (FSB) report requirements.

Note: Due to significant administrative changes, revision bars are not used in this revision.
4. BACKGROUND

The Seattle AEG formed an FSB that evaluated the DA-2EASy as defined in FAA Type Certificate Data Sheet (TCDS) # A50NM. The evaluation was conducted using the methods described in FAA Advisory Circular (AC) 120-53, Guidance for Conducting and Use of Flight Standardization Board Evaluations.

The Falcon 2000EX EASy is a Falcon 2000EX aircraft with the Honeywell Epic Enhanced Avionics System (EASy) cockpit.

The Falcon 2000DX is a commercial designation for Falcon 2000EX EASy aircraft on which Major Modifications M3000 and M3001 have been applied. Falcon 2000DX modifications mainly consist in fuel tanks reduction (M3000) and Fuel Quantity Management Computer adaptation (M3001).

The Falcon 2000LX is a commercial designation for Falcon 2000EX EASy and Falcon 2000DX aircraft on which Major Modification M2846 has been applied. Falcon 2000LX modification consists of the addition of winglets for increased cruise efficiency and the necessary strengthened structures to support the center of lift shift.

Prior to revision 7 of this report, the FSB conducted an evaluation of the F2000LXS and F2000S variations. They, as well as the associated Airplane Flight Manual (AFM) change, were found to be operationally suitable. Training and checking requirements are listed in Appendix 10.

The Falcon 2000LXS is a commercial designation for Falcon 2000LX on which Major Modification M5000 has been applied. Falcon 2000LXS modifications mainly consist of installation of inboard movable slats (M5000). The Falcon 2000S is a commercial designation for Falcon 2000LXS on which Major Modification M3000 has been applied. Falcon 2000S modification mainly consists of fuel tank reduction (M3000).

The FSB conducted an evaluation of the Honeywell Enhanced Avionics System (EASy) II avionics upgrade. It, as well as the associated AFM change, was found to be operationally suitable. Training requirements are listed in Appendix 9.

Note that EX EASy, DX, and LX variations can be equipped with EASy I or EASy II avionics suites, and LXS and S variations can only be equipped with EASy II avionics suite.

The FSB has determined that the Falcon 2000EX EASy, Falcon 2000DX, Falcon 2000LX, Falcon 2000LXS, and Falcon 2000S have a different pilot type rating than previous Falcon 2000 models.

Prior to revision 7 of this report, the FSB conducted an evaluation of SA CAT I and SA CAT II operations, and they were found to be operationally suitable. Training and checking requirements are listed in Appendix 4.

In April 2016, the FSB conducted flight evaluations of the FalconEye (HUD/SVS/EVS/CVS) system in a DA-2EASy aircraft. The FalconEye HUD combines Synthetic and Enhanced Vision...
information on the HUD display. It, as well as the associated AFM change, was found to be operationally suitable for situational awareness. Training requirements are listed in Appendix 5.

5. ACRONYMS

- 14 CFR  Title 14 of the Code of Federal Regulations
- AAL  Above Airport Level
- AC  Advisory Circular
- ADS-B  Automatic Dependent Surveillance-Broadcast
- AEG  Aircraft Evaluation Group
- AFCS  Automatic Flight Control System
- AFM  Airplane Flight Manual
- AFS  FAA Flight Standards Service
- AOA  Angle of Attack
- AP  Autopilot
- AT  Autothrottle
- ATC  Air Traffic Control
- ATN  Aeronautical Telecommunications Network
- CAT  Category (e.g., CAT II ILS)
- CCD  Cursor Control Device
- CODDE  Crew Operational Documentation for Dassault EASy
- CPDLC  Controller Pilot Data Link Communication
- CPT  Cockpit Procedures Trainer
- CVS  Combined Vision System
- DA  Decision Altitude
- DH  Decision Height
- EASy  Enhanced Avionics System
- EFB  Electronic Flight Bag
- EFVS  Enhanced Flight Vision System
- EPM  Electronic Performance Manual
- EVS  Enhanced Vision System
- FAA  Federal Aviation Administration
- FADEC  Full Authority Digital Engine Control
- FAF  Final Approach Fix
- FD  Flight Director
- FFS  Full Flight Simulator
- FL  Flight Level
- FMS  Flight Management System
- FPA  Flight Path Angle
- FPV  Flight Path Vector
- FSB  Flight Standardization Board
- FSTD  Flight Simulation Training Device
- FTD  Flight Training Device
• GPS  Global Positioning System
• HGS  Head-Up Guidance System
• HUD  Head-Up Display
• ILS  Instrument Landing System
• IMC  Instrument Meteorological Conditions
• I-NAV  Interactive Navigation
• IR  Infrared
• KT  Knot (nautical mile per hour)
• LPV  Localizer Performance with Vertical Guidance
• MCDU  Multipurpose Control and Display Unit
• MDU  Multifunction Display Unit
• MDR  Master Differences Requirements
• MMEL  Master Minimum Equipment List
• MRW  Maximum Ramp Weight
• MTOW  Maximum Takeoff Weight
• N/A  Not Applicable
• NSP  National Simulator Program
• ODR  Operator Differences Requirements
• OE  Operating Experience
• OpSpecs  Operations Specifications
• PAPI  Precision Approach Path Indicator
• PDU  Primary Display Unit
• PF  Pilot Flying
• PIC  Pilot in Command
• PM  Pilot Monitoring
• QRH  Quick Reference Handbook
• RAAS  Runway Awareness Advisory System
• RNP  Required Navigation Performance
• RTO  Rejected Takeoff
• RVR  Runway Visual Range
• SA  Special Authorization
• SBAS  Satellite-Based Augmentation System
• SIC  Second in Command
• SMGCS  Surface Movement Guidance and Control System
• SVS  Synthetic Vision System
• TCAS  Traffic Alert and Collision Avoidance System
• TCDS  Type Certificate Data Sheet
• TCPM  Training Center Program Manager
• TOGA  Takeoff/Go-Around
• TOLD  Takeoff and Landing Data
• VGP  Vertical Guidance Path
• VHF  Very High Frequency
• VMC  Visual Meteorological Conditions
• VNAV  Vertical Navigation
6. DEFINITIONS

These definitions are for the purposes 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 crewmembers. Difference levels range from A to E.

6.4 **Master Differences Requirements (MDR).** Specifies the highest training and checking difference levels between a pair of related aircraft derived from the Differences Tables.

6.5 **Mixed Fleet Flying.** 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.** An AEG process to determine pilot type rating, minimum crewmember training, checking and currency requirements, and unique or special airman certification requirements (e.g., specific flight characteristics, no-flap landing).

6.7 **Operational Suitability.** An AEG 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 Federal Regulations (14 CFR) parts 91, 121, 133, and 135).

6.8 **Qualified.** A crewmember 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 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 training devices, or training equipment.
6.12 **Specific Flight Characteristics.** 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. Dassault Falcon 2000EX EASy, DX, LX, LXS, and S aircraft share the same pilot type rating, which is designated DA-2EASy.

7.2 Common Type Ratings. Not applicable.

7.3 Military Equivalent Designations. Military aircraft that qualify for the DA-2EASy can be found on the faa.gov website under Licenses and Certificates, Airmen Certification, Online Services, Aircraft Type Rating Designators. This webpage is kept up-to-date and can be found at [http://www.faa.gov/licenses_certificates/airmen_certification](http://www.faa.gov/licenses_certificates/airmen_certification).

8. **RELATED AIRCRAFT**

8.1 Related Aircraft on the Same TCDS. The following aircraft are all related: Falcon 2000EX EASy, Falcon 2000DX, Falcon 2000LX, Falcon 2000LXS, and Falcon 2000S.

8.2 Related Aircraft on Different TCDS. Not applicable.

9. **PILOT TRAINING**

9.1 Airman Experience. Airmen receiving DA-2EASy initial type training will benefit from prior experience operating multi-engine transport turbojet aircraft. Additionally, a working knowledge of advanced aircraft systems, and highly integrated avionics systems with electronic flight displays, is highly recommended. Pilots without this experience may require additional training.

9.2 Special Emphasis Areas.

9.2.1 Pilots must receive special emphasis on the following areas during ground training:

   a. Documentation, including CODDE 1, CODDE 2, Quick Reference Handbook (QRH) 1, QRH 2, Pilot Assist List, and Master Minimum Equipment List (MMEL). This item must be included in initial, transition, differences, upgrade, and recurrent training.

   b. EASy Avionics, including avionics architecture, display and panel management, Primary Display Units (PDU), Multifunction Display Units (MDU), and Electronic Checklists (ECL). This item must be included in initial, transition, differences, upgrade, and recurrent training.
9.2.2 Pilots must receive special emphasis on and perform the following areas during flight training:

   a. Use of documentation, including CODDE 1, CODDE 2, QRH 1, QRH 2, Pilot Assist List, and MMEL. This item must be included in initial, transition, differences, upgrade, and recurrent training

   b. EASy Avionics, including avionics architecture, display and panel management, PDUs, MDUs, and ECLs. This item must be included in initial, transition, differences, upgrade, and recurrent training.

9.3 Specific Flight Characteristics. There are no specific flight characteristics.

9.4 Seat Dependent Tasks. Pilots must receive training in these seat dependent tasks:

9.4.1 Passenger Oxygen System activation (right seat); initial training,

9.4.2 Manual Landing Gear Extension (right seat); initial training,

9.4.3 Operators who elect to install the optional HUD must train and check seat dependent tasks associated with the HUD (both seats); initial, recurrent training,

9.4.4 Emergency (parking) brake activation (both seats); initial training.

9.5 Regulatory Training Requirements Which Are Not Applicable to the DA-2EASy. None.

9.6 Flight Simulation Training Devices (FSTD).

9.6.1 When HUD training is conducted in a simulator, it must be trained in a level C or higher full flight simulator (FFS) with a Head-Up Guidance System (HGS) and an operative visual system. See additional information in Appendix 4.

9.6.2 EFVS must be trained in a level C or higher FFS with a daylight visual system. See additional information in Appendix 5.

9.7 Training Equipment. There are no specific systems or procedures that are unique to the DA-2EASy that require specific training equipment.


9.9 Multiple Curricula Training Programs (reduced planned hour training programs). The FSB has determined that the DA-2EASy (all variations) has numerous systems that share common characteristics with the DA-EASy (all variations). It may be possible, in accordance with FAA Order 8900.1, Volume 3, Chapter 19, Section 1, Scope, Concepts,
and Definitions, to develop reduced planned hour training programs for pilots with previous training and experience in the DA-EASy.

Candidates for a reduced planned hour training program in the DA-2EASy must, at a minimum, have the following qualifications and recent experience:

9.9.1 Must hold an unrestricted type rating in DA-EASy aircraft.
9.9.2 Must have a minimum of 150 hours Pilot in Command (PIC) or Second in Command (SIC) pilot time in DA-EASy aircraft, as appropriate to the type they hold, within the previous 12 months.
9.9.3 Must have satisfactorily completed a proficiency/competency check (14 CFR part 61, § 61.58, part 91, § 91.1065, part 121, § 121.441, or part 135, § 135.293) in a DA-EASy, as appropriate to the type they hold, within the previous 12 months.

10. PILOT CHECKING

There are no additional pilot checking requirements for the DA-2EASy other than those already specified in parts 61, 121, and 135.

10.1 Landing from a No-Flap or Non Standard Flap Approach. The probability of flap extension failure on the DA-2EASy is not extremely remote due to system design. Therefore, demonstration of a no-flap approach and landing during pilot certification or a § 61.58 proficiency check, § 91.1065 competency check, § 121.441 proficiency check, or § 135.293 competency check is required. Refer to Order 8900.1, Volume 5 when the test or check is conducted in an aircraft versus an FFS.

10.2 Specific Flight Characteristics. There are no specific flight characteristics.

10.3 Seat Dependent Tasks. There are no seat dependent tasks.

10.4 Other Checking Items. Not applicable.

10.5 FSTDs. There are no specific systems, procedures, or maneuvers that are unique to the DA-2EASy that require a specific FSTD for checking.

10.6 Equipment. There are no specific systems or procedures that are unique to the DA-2EASy that require specific equipment.

10.7 Differences Checking Between Related Aircraft. Not applicable.

11. PILOT CURRENCY

11.1 Pilots must maintain currency in the following - Autobrake System. Two full stop landings as the pilot flying (PF) using the autobrake system within 12 consecutive months. See additional information in Appendix 6.
11.2 Differences Currency Between Related Aircraft. Not applicable.

12. OPERATIONAL SUITABILITY

The DA-2EASy is operationally suitable for operations under parts 91, part 91 subpart K (part 91K), 121, and 135.

13. MISCELLANEOUS

13.1 Forward Observer Seat. The observer seat on the DA-2EASy installed during type certificate A50NM satisfies the requirement of § 135.75.

13.2 Landing Minima Categories - Reference 14 CFR part 97, § 97.3, The DA-2EASy final approach speed at max gross landing weight results in the requirement to use Category C approach minimums for straight-in approaches during normal operations. Operators may be required to use Category D minimums for circling approaches or in abnormal or emergency situations when approach speed exceeds the upper limit of Category C.

13.3 Emergency Evacuation, The FSB has not evaluated an emergency evacuation from the DA-2EASy.

13.4 Normal Landing Flaps, The DA-2EASy normal “final landing flap setting” per § 91.126(c) is “SF3”.

13.5 Aircraft Proving Tests. Proving tests in accordance with 14 CFR are appropriate for parts 91, 91K, 121, and 135 operations when the DA-2EASy is new to an operator.

13.6 EFB. Refer to the Operational Suitability Report (OSR) titled Dassault-Aviation Electronic Flight Bag (EFB) Type B Software, Jeppesen FliteDeck, Mobile FD, and EPM for EASy cockpit Presented on the CMC CMA-1100 and iPad2.
## APPENDIX 1. DIFFERENCES LEGEND

### Training Differences Legend

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<th>Training Method Examples</th>
<th>Conditions</th>
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<tr>
<td>A</td>
<td>Self-Instruction</td>
<td>• Operating manual revision (HO)</td>
<td>• Crew has already demonstrated understanding on base aircraft (e.g., updated version of engine).</td>
</tr>
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<td>• Flightcrew operating bulletin (HO)</td>
<td>• Minor or no procedural changes required.</td>
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<tr>
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<td></td>
<td>• No safety impact if information is not reviewed or is forgotten (e.g., different engine vibration damping mount).</td>
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<td></td>
<td>• Once called to attention of crew, the difference is self-evident.</td>
</tr>
<tr>
<td>B</td>
<td>Aided Instruction</td>
<td>• Audiovisual presentation (AV)</td>
<td>• Systems are functionally similar.</td>
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<td>• Tutorial computer-based instruction (TCBI)</td>
<td>• Crew understanding required.</td>
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<tr>
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<td>• Stand-up instruction (SU)</td>
<td>• Issues need emphasis.</td>
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<td>• Standard methods of presentation required.</td>
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<tr>
<td>C</td>
<td>Systems Devices</td>
<td>• Interactive (full-task) computer-based instruction (ICBI)</td>
<td>• Training can only be accomplished through systems training devices.</td>
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<td>• Cockpit procedures trainers (CPT)</td>
<td>• Training objectives focus on mastering individual systems, procedures, or tasks versus highly integrated flight operations or real-time operations.</td>
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<td>• Part task trainers (PTT)</td>
<td>• Training devices are required to assure attainment or retention of crew skills to accomplish more complex tasks usually related to aircraft systems.</td>
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<td>• Level 4 or 5 flight training device (FTD 4-5)</td>
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<tr>
<td>D</td>
<td>Maneuvers Devices</td>
<td>• Level 6 or 7 flight training device (FTD 6-7)</td>
<td>• Training can only be accomplished in flight maneuver devices in a real-time environment.</td>
</tr>
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<td>• Level A or B full flight simulator (FFS A-B)</td>
<td>• Training requires mastery of interrelated skills versus individual skills.</td>
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<td>• Motion, visual, control loading, and specific environmental conditions may be required.</td>
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<tr>
<td>Differences Level</td>
<td>Type</td>
<td>Training Method Examples</td>
<td>Conditions</td>
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| E                 | Level C/D FFS or Aircraft | • Level C or D full flight simulator (FFS C-D)  
• Aircraft (ACFT) | • Motion, visual, control loading, audio, and specific environmental conditions are required.  
• Significant full task differences that require a high fidelity environment.  
• Usually correlates with significant differences in handling qualities. |
### Checking Differences Legend

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

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>F2000EX EASy I</td>
<td>NA</td>
<td>A/A</td>
<td>A/A</td>
<td>C/A</td>
<td>C/A</td>
<td>C/A</td>
<td>C/A</td>
<td>C/A</td>
<td>C/A</td>
</tr>
<tr>
<td>F2000DX EASy I</td>
<td>A/A</td>
<td>NA</td>
<td>A/A</td>
<td>C/A</td>
<td>C/A</td>
<td>C/A</td>
<td>C/A</td>
<td>C/A</td>
<td>C/A</td>
</tr>
<tr>
<td>F2000LX EASy I</td>
<td>A/A</td>
<td>A/A</td>
<td>NA</td>
<td>C/A</td>
<td>C/A</td>
<td>C/A</td>
<td>C/A</td>
<td>C/A</td>
<td>C/A</td>
</tr>
<tr>
<td>F2000EX EASy II</td>
<td>D/A</td>
<td>D/A</td>
<td>D/A</td>
<td>NA</td>
<td>A/A</td>
<td>A/A</td>
<td>B/A</td>
<td>B/A</td>
<td></td>
</tr>
<tr>
<td>F2000DX EASy II</td>
<td>D/A</td>
<td>D/A</td>
<td>D/A</td>
<td>A/A</td>
<td>NA</td>
<td>A/A</td>
<td>B/A</td>
<td>B/A</td>
<td></td>
</tr>
<tr>
<td>F2000LX EASy II</td>
<td>D/A</td>
<td>D/A</td>
<td>D/A</td>
<td>A/A</td>
<td>A/A</td>
<td>NA</td>
<td>B/A</td>
<td>B/A</td>
<td></td>
</tr>
<tr>
<td>F2000LXS</td>
<td>D/A</td>
<td>D/A</td>
<td>D/A</td>
<td>B/A</td>
<td>B/A</td>
<td>B/A</td>
<td>NA</td>
<td>A/A</td>
<td></td>
</tr>
<tr>
<td>F2000S</td>
<td>D/A</td>
<td>D/A</td>
<td>D/A</td>
<td>B/A</td>
<td>B/A</td>
<td>B/A</td>
<td>A/A</td>
<td>NA</td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX 3. DIFFERENCES TABLES

1. **Falcon 2000EX EASy Definition (Approved June 21, 2004)**

   EASy designation for Falcon 2000EX does not correspond to a model designation. This is only a commercial designation for Falcon 2000EX airplanes on which Major Modifications M1691, M1745, and M1504 have been installed.

   Modification M1691 consists of the installation of an Enhanced Avionics System (EASy) based on the Honeywell “Primus EPIC” product line. This system architecture is mainly built around two cabinets called Modular Avionics Units (MAU), two Modular Radio Cabinets (MRC), two Audio panels, two reversionary panels, and four 14.1-inch liquid crystal displays (LCD). The pilots have access to the system using the two Cursor Control Devices (CCD) with multipurpose knob, menu pushbutton, display switch, action pushbuttons, and trackball, two alphanumeric keyboards, and the hard controls.

   Modification M1745 installs an “Oxygen system electro-pneumatic altimetric controller”.

   Modification M1504 installs an “All Falcon Common pressurization system”.

   All parameters for the basic Falcon 2000EX remain valid.

   Modifications M1691, M1745, and M1504 are on all Falcon 2000EX aircraft serial numbers 6, 28, and subsequent.

   This is the base aircraft.

2. **Falcon 2000DX Definition (Approved October 3, 2007)**

   The DX designation of the Falcon 2000EX does not correspond to a model designation. The Falcon 2000DX is only a commercial designation for Falcon 2000EX EASy aircraft on which Modifications M3000 and M3001 are installed at production.

   Modification M3000 defines the airplane and reduces the fuel tank capacity.

   Modification M3001 installs a new fuel quantity indication system.
All parameters listed for the Falcon 2000EX EASy remain valid, except for the following useable fuel:

- Front Tank - 189 U.S. gallons, 1,268 lbs.
- Rear Tank - 183 U.S. gallons, 1,224 lbs.

Modifications M3000 and M3001 are basic on all Falcon 2000EX airplanes in the EASy configuration starting with serial number 601 and subsequent.

EASy to DX:

- Flight Characteristics are not affected by this difference.
- Procedures are affected by this difference.

3. **Falcon 2000LX Definition (Approved April 29, 2009)**

The LX designation of the Falcon 2000EX does not correspond to a model designation. The Falcon 2000LX is only a commercial designation for Falcon 2000EX EASy aircraft on which Modifications M2846 and M3229 are installed.

Modification M2846 incorporates winglets.

Modification M3229 is the adaptation of the external slats to F2000LX.

EASy to LX:

- Flight Characteristics are not affected by this difference.
- Procedures are not affected by this difference.

4. **Falcon 2000LXS Definition (Approved March 25, 2013)**

The LXS definition of the Falcon 2000EX does not correspond to a model designation. The Falcon 2000LXS is only a commercial designation for Falcon 2000LX aircraft on which Modifications M3254, M3390, M3453, and M5000 are installed at production.

Modification M3254 incorporates the EASy Phase II.
Modification M3390 incorporates a weight and balance envelope increase for takeoff.

Modification M3453 incorporates new FADEC, software V9.03 for the PW308C engines.

Modification M5000 incorporates movable inboard leading edge slats.

LX to LXS:

- Flight Characteristics are not affected by this difference.
- Procedures are affected by this difference.

5. Falcon 2000S Definition (Approved March 25, 2013)

The S definition of the Falcon 2000EX does not correspond to a model designation. The Falcon 2000S is only a commercial designation for Falcon 2000EX airplanes in the LXS configuration on which Modifications M3000, M3001, and M5001 are installed at production.

Modification M3000 defines the airplane and reduces the fuel tank capacity.

Modification M3001 installs a new fuel quantity indication system.

Modification M5001 incorporates movable inboard leading edge slats.

LXS to S:

- Flight Characteristics are not affected by this difference.
- Procedures are not affected by this difference.

6. Design and Maneuver Tables

Differences Tables have been validated by the FSB. They identify differences between variations and list the minimum differences levels operators must use to conduct differences training and checking of flightcrew members.
This **Design** Differences table, from the **F2000EX EASy** to the **F2000DX**, was proposed by Dassault Aviation and validated by the FSB. It lists the minimum differences levels operators must use to conduct differences training and checking of flightcrew members.

<table>
<thead>
<tr>
<th>FROM BASE AIRCRAFT: F2000EX EASy</th>
<th>DESIGN</th>
<th>REMARKS</th>
<th>FLT CHAR</th>
<th>PROC CHNG</th>
<th>TRAINING</th>
<th>CHECKING</th>
</tr>
</thead>
<tbody>
<tr>
<td>TO RELATED AIRCRAFT: F2000DX</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DOCUMENTATION</td>
<td>No Change</td>
<td></td>
<td>No</td>
<td>No</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>28 – FUEL</td>
<td>Tank capacity = 14,694 lbs. Modification of the Fuel Quantity Management Computer to fit the new fuel tanks configuration. No cruise fuel balance procedure.</td>
<td>No</td>
<td>Yes</td>
<td>A</td>
<td>A</td>
<td></td>
</tr>
<tr>
<td>28 – FUEL</td>
<td>New fuel synoptic to match new fuel tank configuration</td>
<td>No</td>
<td>No</td>
<td>A</td>
<td>A</td>
<td></td>
</tr>
<tr>
<td>LIMITATIONS</td>
<td>WEIGHT MRW 41,200 lbs. MTOW 41,000 lbs.</td>
<td>No</td>
<td>No</td>
<td>A</td>
<td>A</td>
<td></td>
</tr>
<tr>
<td>LIMITATIONS</td>
<td>MAX FUEL 14,694 lbs.</td>
<td>No</td>
<td>No</td>
<td>A</td>
<td>A</td>
<td></td>
</tr>
<tr>
<td>LIMITATIONS</td>
<td>Center of Gravity (CG) LIMITS Negligible</td>
<td>No</td>
<td>No</td>
<td>A</td>
<td>A</td>
<td></td>
</tr>
</tbody>
</table>
This **Design** Differences table, from the **F2000EX EASy** to the **F2000LX**, was proposed by Dassault Aviation and validated by the FSB. It lists the minimum differences levels operators must use to conduct differences training and checking of flightcrew members.

<table>
<thead>
<tr>
<th>FROM BASE AIRCRAFT: F2000EX EASy</th>
<th>DESIGN</th>
<th>REMARKS</th>
<th>FLT CHAR</th>
<th>PROC CHNG</th>
<th>TRAINING</th>
<th>CHECKING</th>
</tr>
</thead>
<tbody>
<tr>
<td>TO RELATED AIRCRAFT: F2000LX</td>
<td>DIMENSIONS</td>
<td>No change except wing span: 21.38 m/70 ft. 2 in.</td>
<td>No</td>
<td>No</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td></td>
<td>70 – ENGINE</td>
<td>As per AFM Limitations, for scheduled flight durations greater than 10 hours (including time to alternate), engine oil levels must be checked and verified to be above the MIN oil level indicator line by at least 50% of the distance between MAX and MIN level indicator markings on each engine.</td>
<td>No</td>
<td>No</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td></td>
<td>WEIGHT/BALANCE</td>
<td>+ 112.2 kg / + 336.6 m.kg</td>
<td>No</td>
<td>No</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td></td>
<td>50 – STRUCTURE</td>
<td>Addition of winglets</td>
<td>No</td>
<td>No</td>
<td>A</td>
<td>A</td>
</tr>
</tbody>
</table>
This Maneuver Differences table, from the **F2000EX EASy** to the **F2000LX**, was proposed by Dassault Aviation and validated by the FSB. It lists the minimum differences levels operators must use to conduct differences training and checking of flightcrew members.

<table>
<thead>
<tr>
<th>FROM BASE AIRCRAFT: F2000EX EASy</th>
<th>MANEUVER</th>
<th>REMARKS</th>
<th>FLT CHAR</th>
<th>PROC CHNG</th>
<th>TRAINING</th>
<th>CHECKING</th>
</tr>
</thead>
<tbody>
<tr>
<td>TO RELATED AIRCRAFT: F2000LX</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>VISUAL INSPECTION</strong></td>
<td></td>
<td>Slats retracted, the slats position is slightly shifted forward (1 cm) compared to a F2000EX EASy</td>
<td>No</td>
<td>No</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td><strong>APPROACH - GENERAL</strong></td>
<td></td>
<td>First certification: no Steep Approach capability</td>
<td>No</td>
<td>No</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td><strong>PRECISION APPROACH</strong></td>
<td></td>
<td>First certification: no HUD 2/3 capability (but still Auto CAT II certified)</td>
<td>No</td>
<td>No</td>
<td>A</td>
<td>A</td>
</tr>
</tbody>
</table>
This Design Differences table, from the **F2000LX (in EASy II)** to the **F2000LXS**, was proposed by Dassault Aviation and validated by the FSB. It lists the minimum differences levels operators must use to conduct differences training and checking of flightcrew members.

<table>
<thead>
<tr>
<th>FROM BASE AIRCRAFT: F2000LX</th>
<th>DESIGN</th>
<th>REMARKS</th>
<th>FLT CHAR</th>
<th>PROC CHNG</th>
<th>TRAINING</th>
<th>CHECKING</th>
</tr>
</thead>
<tbody>
<tr>
<td>TO RELATED AIRCRAFT: F2000LXS</td>
<td>ENGINE TYPE</td>
<td>PW308C or PW308C+</td>
<td>No</td>
<td>Yes</td>
<td>B</td>
<td>A</td>
</tr>
<tr>
<td>DOCUMENTATION</td>
<td>Update/new flight documentation</td>
<td>No</td>
<td>No</td>
<td>A</td>
<td>A</td>
<td></td>
</tr>
<tr>
<td>27 – FLIGHT CONTROLS</td>
<td>Addition of inboard movable slats.</td>
<td>No</td>
<td>Yes</td>
<td>B</td>
<td>A</td>
<td></td>
</tr>
<tr>
<td>27 – FLIGHT CONTROLS</td>
<td>SF1 – Flap travel = 7° Other settings unchanged.</td>
<td>No</td>
<td>No</td>
<td>A</td>
<td>A</td>
<td></td>
</tr>
<tr>
<td>27 – FLIGHT CONTROLS</td>
<td>Sequencing: Extension: Outboard slats extend first, then the inboard slats. Retraction: Inboard slats retract first, then the outboard slats.</td>
<td>No</td>
<td>No</td>
<td>A</td>
<td>A</td>
<td></td>
</tr>
<tr>
<td>27 – FLIGHT CONTROLS</td>
<td>The automatic slats sequencing is modified (stall protection).</td>
<td>No</td>
<td>No</td>
<td>B</td>
<td>A</td>
<td></td>
</tr>
<tr>
<td>27 – FLIGHT CONTROLS</td>
<td>Rudder Travel: 32°</td>
<td>No</td>
<td>No</td>
<td>A</td>
<td>A</td>
<td></td>
</tr>
<tr>
<td>28 – FUEL</td>
<td>Group 1 = 8055 lbs. Group 2 = 8675 lbs. Total = 16,730 lbs.</td>
<td>No</td>
<td>No</td>
<td>A</td>
<td>A</td>
<td></td>
</tr>
<tr>
<td>CONTROL</td>
<td>Inhibition of Slat/flap extension at airspeed &gt; 210 kt.</td>
<td>No</td>
<td>No</td>
<td>A</td>
<td>A</td>
<td></td>
</tr>
<tr>
<td>FROM BASE AIRCRAFT: F2000LX</td>
<td>TO RELATED AIRCRAFT: F2000LXS</td>
<td>DESIGN</td>
<td>REMARKS</td>
<td>FLT CHAR</td>
<td>PROC CHNG</td>
<td>TRAINING</td>
</tr>
<tr>
<td>-----------------------------</td>
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<td>----------</td>
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<td>----------</td>
</tr>
<tr>
<td>INDICATION</td>
<td>The green band for the Horizontal Stabilizer at Takeoff ranges from -6 to -7 degrees.</td>
<td>No</td>
<td>No</td>
<td>A</td>
<td>A</td>
<td></td>
</tr>
<tr>
<td>29 – HYDRAULIC</td>
<td>The inboard slats are powered by Hydraulic #1.</td>
<td>No</td>
<td>Yes</td>
<td>B</td>
<td>A</td>
<td></td>
</tr>
<tr>
<td>31 – INDICATING/RECORDING SYSTEMS</td>
<td>CAS MESSAGE UNWANTED OUTBD SLATS: Uncontrolled extension of the outboard slats (at least one outboard slat is extended while the pilot or the avionics does not command slats extension) INBD SLATS FAIL: Inboard slats fail to retract or extend when commanded OUTBD SLATS FAIL: Outboard slats fail to retract or extend when commanded A/I STALL WARNING OFFSET: The stall warning is not reliable due to A/I failure.</td>
<td>No</td>
<td>Yes</td>
<td>A</td>
<td>A</td>
<td></td>
</tr>
<tr>
<td>32 – LANDING GEAR AND BRAKES</td>
<td>At aircraft entry into service: No Autobrake system</td>
<td>No</td>
<td>Yes</td>
<td>A</td>
<td>A</td>
<td></td>
</tr>
<tr>
<td>FROM BASE AIRCRAFT: F2000LX</td>
<td>DESIGN</td>
<td>REMARKS</td>
<td>FLT CHAR</td>
<td>PROC CHNG</td>
<td>TRAINING</td>
<td>CHECKING</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>--------</td>
<td>---------</td>
<td>----------</td>
<td>-----------</td>
<td>----------</td>
<td>----------</td>
</tr>
<tr>
<td>TO RELATED AIRCRAFT: F2000LXS</td>
<td>34 – NAVIGATION</td>
<td>At aircraft entry into service: no FMS TOLD available</td>
<td>No</td>
<td>Yes</td>
<td>B</td>
<td>A</td>
</tr>
<tr>
<td>70 – ENGINE</td>
<td>The combustion chamber is modified to improve the engine emission rate. The Electronic Engine Control is changed (see Modification M5000 information).</td>
<td>No</td>
<td>No</td>
<td>A</td>
<td>A</td>
<td></td>
</tr>
<tr>
<td>LIMITATIONS</td>
<td>WEIGHT</td>
<td>Effect on weight: +58.3 kg Effect on balance: -75.7 m.kg</td>
<td>No</td>
<td>No</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>LIMITATIONS</td>
<td>SPEED</td>
<td>Change in Minimum Control Speed Ground (VMCG), Minimum Control Speed Air (VMCA), Minimum control Speed Landing (VMCL), and Landing Reference Speed (VREF).</td>
<td>No</td>
<td>No</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>LIMITATIONS</td>
<td>POWER PLANT</td>
<td>In case of engine failure, the takeoff thrust rating is limited to 10 minutes time.</td>
<td>No</td>
<td>No</td>
<td>B</td>
<td>A</td>
</tr>
<tr>
<td>LIMITATIONS</td>
<td>TAKEOFF CONFIG</td>
<td>Only SF2</td>
<td>No</td>
<td>No</td>
<td>B</td>
<td>A</td>
</tr>
</tbody>
</table>
### LIMITATIONS

**OPERATIONAL CAPABILITIES**
- At aircraft entry into service:
  - No Automatic CAT II
  - No Steep approach
  - No HUD operation

<table>
<thead>
<tr>
<th>DESIGN</th>
<th>REMARKS</th>
<th>FLT CHAR</th>
<th>PROC CHNG</th>
<th>TRAINING</th>
<th>CHECKING</th>
</tr>
</thead>
<tbody>
<tr>
<td>LIMITATIONS</td>
<td>OPERATIONAL CAPABILITIES</td>
<td>No</td>
<td>No</td>
<td>A</td>
<td>A</td>
</tr>
</tbody>
</table>
This **Maneuver Differences** table, from the **F2000LX (in EASy II)** to the **F2000LXS**, was proposed by Dassault Aviation and validated by the FSB. It lists the minimum differences levels operators must use to conduct differences training and checking of flightcrew members.

<table>
<thead>
<tr>
<th>FROM BASE AIRCRAFT: F2000LX</th>
<th>MANEUVER</th>
<th>REMARKS</th>
<th>FLT CHAR</th>
<th>PROC CHNG</th>
<th>TRAINING</th>
<th>CHECKING</th>
</tr>
</thead>
<tbody>
<tr>
<td>TO RELATED AIRCRAFT: F2000LXS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>COCKPIT PREPARATION</td>
<td>Manual speeds (no TOLD).</td>
<td>No</td>
<td>Yes</td>
<td>B</td>
<td>A</td>
</tr>
<tr>
<td></td>
<td>START</td>
<td>Ignition (IGN) when N2 &gt; 15%</td>
<td>No</td>
<td>Yes</td>
<td>B</td>
<td>A</td>
</tr>
<tr>
<td></td>
<td>AFTER START</td>
<td>New “STALL 1 and 2” tests.</td>
<td>No</td>
<td>Yes</td>
<td>B</td>
<td>A</td>
</tr>
<tr>
<td></td>
<td>FLIGHT PROFILES</td>
<td>Change in minimum approach speed and maneuvering speed</td>
<td>No</td>
<td>Yes</td>
<td>B</td>
<td>A</td>
</tr>
<tr>
<td></td>
<td>FLIGHT PROFILES</td>
<td>Normal Takeoff Go-Around One Engine Inoperative VFR = V₂ + 25 kt / V_REF + 25 kt</td>
<td>No</td>
<td>No</td>
<td>B</td>
<td>A</td>
</tr>
<tr>
<td>FROM BASE AIRCRAFT: F2000LX</td>
<td>MANEUVER</td>
<td>REMARKS</td>
<td>FLT CHAR</td>
<td>PROC CHNG</td>
<td>TRAINING</td>
<td>CHECKING</td>
</tr>
<tr>
<td>----------------------------</td>
<td>----------</td>
<td>---------</td>
<td>----------</td>
<td>-----------</td>
<td>----------</td>
<td>----------</td>
</tr>
</tbody>
</table>
| TO RELATED AIRCRAFT: F2000LXS | ABNORMAL Loss of #1 or #2 hydraulic system,  
– Landing with inoperative stabilizer or elevator,  
– Arthur unit inoperative,  
– Trim malfunction,  
– Slats/flaps system malfunction,  
– Airbrake system malfunction,  
– ESS bus inoperative,  
– LH + ESS busses inoperative,  
– Anti-ice stall warning offset. | Change in:  
– landing distance penalty,  
– approach speed. | No | Yes | A | A |
<p>| Engine failure after $V_1$ | T/O thrust on the live engine is limited to 10 minutes time. Electrical buses must be tied at Acceleration Altitude (i.e., Takeoff Safety Altitude (TOSA)). | No | Yes | B | A |
| Rejected Takeoff (RTO) on a wet runway | RTO procedure instructs to reverse the live engine thrust, on a wet runway. | No | Yes | B | A |</p>
<table>
<thead>
<tr>
<th>FROM BASE AIRCRAFT: F2000LX</th>
<th>MANEUVER</th>
<th>REMARKS</th>
<th>FLT CHAR</th>
<th>PROC CHNG</th>
<th>TRAINING</th>
<th>CHECKING</th>
</tr>
</thead>
<tbody>
<tr>
<td>TO RELATED AIRCRAFT: F2000LXS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Brake system malfunction</td>
<td>Change in landing distance penalty.</td>
<td>No</td>
<td>Yes</td>
<td>A</td>
<td>A</td>
</tr>
</tbody>
</table>
|                             | Wing anti-ice system | Change in:  
– landing distance penalty,  
– approach speed,  
– climb gradient. | No | Yes | A | A |
<p>|                             | Loss of both hydraulic systems | Approach speed changed. | No | Yes | A | A |
|                             | GEN 1 &amp; 2 INOP | Change in landing distance penalty. | No | Yes | A | A |
|                             | Two engines out in cruise/holding condition | Different gliding distance. | No | Yes | A | A |
|                             | Windshear recovery | The pilot must be aware that the Windshear recovery procedure does not instruct to fly the FD. | No | Yes | B | A |
|                             | PERFORMANCE | Maximum demonstrated crosswind is 30 kts. | No | No | A | A |
|                             | PERFORMANCE | Low speed performance changed. | No | No | A | A |
|                             | PERFORMANCE | Takeoff and Landing charts are specific to F2000 LXS aircraft. | No | No | B | A |
|                             | PERFORMANCE | Rejected Takeoff on wet runway: full reverse thrust on live engine is taken into account to compute Balanced Field Length. | No | Yes | B | A |</p>
<table>
<thead>
<tr>
<th>FROM BASE AIRCRAFT: F2000LX</th>
<th>TO RELATED AIRCRAFT: F2000LXS</th>
<th>MANEUVER</th>
<th>REMARKS</th>
<th>FLT CHAR</th>
<th>PROC CHNG</th>
<th>TRAINING</th>
<th>CHECKING</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>PERFORMANCE</td>
<td>New landing distance performance data on wet runways.</td>
<td>No</td>
<td>Yes</td>
<td>B</td>
<td>A</td>
<td></td>
</tr>
<tr>
<td></td>
<td>PERFORMANCE</td>
<td>Not Certified for Takeoff and Landing on a contaminated Runway.</td>
<td>No</td>
<td>No</td>
<td>A</td>
<td>A</td>
<td></td>
</tr>
</tbody>
</table>
This **Design** Differences table, from the **F2000LXS** to the **F2000S**, was proposed by Dassault Aviation and validated by the FSB. It lists the minimum differences levels operators must use to conduct differences training and checking of flightcrew members.

<table>
<thead>
<tr>
<th>FROM BASE AIRCRAFT: F2000LXS</th>
<th>TO RELATED AIRCRAFT: F2000S</th>
<th>DESIGN</th>
<th>REMARKS</th>
<th>FLT CHAR</th>
<th>PROC CHNG</th>
<th>TRAINING</th>
<th>CHECKING</th>
</tr>
</thead>
<tbody>
<tr>
<td>DOCUMENTATION</td>
<td></td>
<td>No change but the insertion of M5001 specific pages in the flight documentation.</td>
<td>No</td>
<td>No</td>
<td>A</td>
<td>A</td>
<td></td>
</tr>
<tr>
<td>28 – FUEL</td>
<td></td>
<td>The tank capacity is reduced. Group 1 = 7,315 lbs. Group 2 = 7,379 lbs. Total = 14,694 lbs.</td>
<td>No</td>
<td>No</td>
<td>A</td>
<td>A</td>
<td></td>
</tr>
<tr>
<td>34 – NAVIGATION</td>
<td></td>
<td>Max capacity for each tank is modified in FUEL SYNOPTIC.</td>
<td>No</td>
<td>No</td>
<td>A</td>
<td>A</td>
<td></td>
</tr>
<tr>
<td>LIMITATIONS</td>
<td></td>
<td>WEIGHT MRW = 41,200 lbs. MTOW = 41,000 lbs.</td>
<td>No</td>
<td>No</td>
<td>A</td>
<td>A</td>
<td></td>
</tr>
</tbody>
</table>
This **Maneuver** Differences table, from the **F2000LXS** to the **F2000S**, was proposed by Dassault Aviation and validated by the FSB. It lists the minimum differences levels operators must use to conduct differences training and checking of flightcrew members.

<table>
<thead>
<tr>
<th>FROM BASE AIRCRAFT: F2000LXS</th>
<th>MANEUVER</th>
<th>REMARKS</th>
<th>FLT CHAR</th>
<th>PROC CHNG</th>
<th>TRAINING</th>
<th>CHECKING</th>
</tr>
</thead>
<tbody>
<tr>
<td>TO RELATED AIRCRAFT: F2000S</td>
<td>CRUISE</td>
<td>The fuel imbalance is negligible.</td>
<td>No</td>
<td>No</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td></td>
<td>PERFORMANCE</td>
<td>Lower endurance.</td>
<td>No</td>
<td>No</td>
<td>A</td>
<td>A</td>
</tr>
</tbody>
</table>
This Design Differences table, from the F2000EX EASy/DX/LX to the F2000EX EASy/DX/LX equipped with Autobrake, was proposed by Dassault Aviation and validated by the FSB. It lists the minimum differences levels operators must use to conduct differences training and checking of flightcrew members.

<table>
<thead>
<tr>
<th>FROM BASE AIRCRAFT: F2000EX EASy/DX/LX</th>
<th>DESIGN</th>
<th>REMARKS</th>
<th>FLT CHAR</th>
<th>PROC CHNG</th>
<th>TRAINING</th>
<th>CHECKING</th>
</tr>
</thead>
<tbody>
<tr>
<td>TO RELATED AIRCRAFT: F2000EX EASy/DX/LX equipped with Autobrake</td>
<td>FLIGHT DECK</td>
<td>New AUTOBRAKE button added above the landing gear handle.</td>
<td>No</td>
<td>Yes</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td></td>
<td>LIMITATIONS</td>
<td>See AFM Supplement.</td>
<td>No</td>
<td>Yes</td>
<td>B</td>
<td>A</td>
</tr>
<tr>
<td></td>
<td>PERFORMANCE</td>
<td>The use of AUTOBRAKE decreases landing distance</td>
<td>Yes</td>
<td>No</td>
<td>B</td>
<td>A</td>
</tr>
<tr>
<td></td>
<td>32 – LANDING GEAR AND BRAKES</td>
<td>See Modification M3177-100 for description of system differences.</td>
<td>No</td>
<td>Yes</td>
<td>B</td>
<td>A</td>
</tr>
<tr>
<td></td>
<td>CONTROLS AND INDICATIONS</td>
<td>See Modification M3177-100 for description of system differences.</td>
<td>No</td>
<td>Yes</td>
<td>B</td>
<td>A</td>
</tr>
<tr>
<td></td>
<td>SYSTEM PROTECTION</td>
<td>See Modification M3177-100 for description of system differences.</td>
<td>No</td>
<td>No</td>
<td>B</td>
<td>A</td>
</tr>
</tbody>
</table>
This **Maneuver Differences** table, from the **F2000EX EASy/DX/LX** to the **F2000EX EASy/DX/LX equipped with Autobrake**, was proposed by Dassault Aviation and validated by the FSB. It lists the minimum differences levels operators must use to conduct differences training and checking of flightcrew members.

<table>
<thead>
<tr>
<th>FROM BASE AIRCRAFT: F2000EX EASy/DX/LX TO RELATED AIRCRAFT: F2000EX EASy/DX/LX equipped with Autobrake</th>
<th>MANEUVER</th>
<th>REMARKS</th>
<th>FLT CHAR</th>
<th>PROC CHNG</th>
<th>TRAINING</th>
<th>CHECKING</th>
</tr>
</thead>
<tbody>
<tr>
<td>LANDING</td>
<td></td>
<td>Flight Characteristics are the same as those encountered during a Maximum Braking landing. Feet position during landing should be on upper brake pedals in order to easily disengage the AUTOBRAKE at nosewheel touchdown. For the transition from AUTOBRAKE to manual braking, the pilot should fully depress the brake pedals at nosewheel touchdown. This will lead to maximum performance braking and disengagement of the AUTOBRAKE system.</td>
<td>No</td>
<td>Yes</td>
<td>D</td>
<td>A</td>
</tr>
</tbody>
</table>
APPENDIX 4. HEAD-UP DISPLAY (HUD)

1. Background

This appendix pertains to Rockwell Collins Head-Up Guidance System (HGS) 4860 and 4860i, and the FalconEye Head-Up Display (HUD) installed in the DA-2EASy (all variations). Additional training requirements for these systems equipped with Enhanced Flight Vision Systems (EFVS) and/or Synthetic Vision Systems (SVS) are described in Appendix 5.

2. Pilot Type Rating

Not applicable.

3. Related Aircraft

Not applicable.

4. Pilot Training

Unless covered concurrently during an initial or transition type rating course, a prerequisite to beginning this course is prior training, qualification, and currency in the DA-2EASy airplane. This training program focuses primarily on the Pilot Flying (PF), but Pilot Monitoring (PM) indoctrination and training is also essential. Where there are procedural differences for the PM when the PF is using the HUD, training of PM duties in the right seat is required.

Note: Dassault documentation includes references to the Pilot Not Flying (PNF). For the purposes of this document, the terms “PNF” and “PM” are used synonymously.

The training program described here is generic in nature. It does not establish training requirements. Each operator has unique requirements, route structures, fleet composition, and operational policies to consider in developing their training program. Therefore, training described here is to assist an operator tailoring a HUD training program to fit their specific operation or approved Operations Specifications (OpSpecs).

This training can be conducted as a standalone course or integrated into any training curriculum (i.e., initial, transition, upgrade, recurrent). If part of a curriculum, the Flight Standardization Board (FSB) recommends conducting this training early to allow as much use of the HUD as practical during the remaining training.

Dassault Aviation CODDE 2 procedures should be followed.

4.1 Ground Training. Ground training can be instructor led or provided through computer-based training. An initial ground training program should include the following elements:
4.1.1 General.

a. HUD equipment.

b. HUD controls.

c. HUD modes of operation.

d. HUD symbology, including the interrelationship with airplane aerodynamics, limit conditions and failures, inertial factors, and environmental conditions.

e. Operational concepts, crew duties and responsibilities, crew coordination, callouts and responses, and operational procedures including preflight, normal, and non-normal pilot activities.

f. Description of the availability and limitations of visual cues encountered on approach both before and after Decision Altitude (DA). This would include:

i. Procedures for unexpected deterioration of conditions to less than minimum Runway Visual Range (RVR) encountered during approach, flare, and rollout.

ii. Demonstration of expected visual references with weather at minimum conditions.

iii. Expected sequence of visual cues during an approach in which visibility is at or above landing minima.

g. If the HUD is used as a Category (CAT) II/CAT III landing system, emphasis on the need for rigorous crew discipline, coordination, and adherence to procedural guidelines as is required for other CAT II/CAT III landing systems.

h. For operators wishing credit for low visibility operations predicated on use of the HUD, additional training should include:

i. Narrative descriptions and several low weather approach demonstrations with procedural callouts and responses. All critical procedural callout possibilities should be covered.

ii. Information on the operational characteristics, capabilities, limitations of the ground facilities (i.e., Surface Movement Guidance and Control System (SMGCS)) and airborne CAT III system.

iii. Operator policies and procedures concerning low visibility operations, including the reporting process, Minimum Equipment List (MEL) issues, operation following a missed approach, Operating Experience (OE), and currency requirements.

4.1.2 Areas of Special Emphasis.

a. Rockwell Collins Only – Distance Measuring Equipment (DME) distance during Localizer Performance with Vertical Guidance (LPV) approach. The crew must be aware that the DME distance displayed in the HUD during LPV approach must be disregarded, as per Airplane Flight Manual (AFM) procedure, until a HUD fix is available (DME distance displayed in the Integrated Primary Flight Display (IPFD) remains correct).

b. FalconEye Only:

i. Instrument Landing System (ILS) deviations instead of expected LPV deviations. ILS frequency must not be selected when flying an LPV approach as the course deviation indicator (CDI) information may be inaccurate. If an ILS frequency is tuned during an LPV approach, the ILS deviations will replace the LPV deviations. The crew must be aware of not tuning an ILS frequency during LPV approaches.

ii. DME distance during LPV approaches. The crew must be aware that the DME distance displayed in the FalconEye HUD during LPV approaches is the distance to the runway threshold.

iii. Lateral deviation scale. Crew must be aware that, during a localizer interception following a Flight Management System (FMS) arrival, two lateral deviation scales (with no labels) are displayed: the lower scale is active (full pointer) for FMS deviation, and the upper scale is armed (empty pointer) until localizer interception.

iv. Thrust Director dynamic. PF must be aware that, when manually using the Thrust Director, the HUD Speed Error Tape indicator anticipates Thrust Director dynamic.

v. Possible Flight Path Vector (FPV) saturation (until a HUD fix is available). PF must be aware that, in some flight conditions (e.g., windshear), the FPV saturates early at the bottom of the HUD. The Vertical Path Reference Line may also disappear. In this case, the FPV is no longer conformal but the value of the Aircraft Path Angle can be read on the pitch scale. The main task of the PF, which is to follow the Flight Director (FD) with the FPV, is not affected by the saturation of the FPV. The FD is positioned relative to the FPV and is correct when FPV is saturated.

vi. FalconEye HUD must only be used in the standard IRS configuration. Until a HUD fix is available, HUD can only be used in the standard inertial reference...
system (IRS) configuration: (IRS 1 selected on LH side, IRS 2 selected on RH side, HUD stowed in all other configurations).

4.2 Flight Training. Unless integrated with initial or transition training, flight training dedicated to HUD familiarization and proficiency is in addition to other required elements.

Flight training should include a variety of ground and airborne system failures requiring pilot recognition and appropriate procedural actions. Demonstrated system/component failures could include flap asymmetry problems, engine out operations, HUD sensor failures, etc. Demonstrate how HUD failure modes can reduce precision and increase pilot workload unless PF/PM duties and responsibilities are clearly delineated and understood.

Note: When a simulator is used, training should be conducted in FAA-approved level ‘C’ or ‘D’ simulators with HUD installed.

4.2.1 Takeoff. Emphasis should be placed on the pilot’s ability to transition from using outside visual cues to utilizing the HUD during the takeoff roll and departure. Emphasis should also be placed on the HUD symbology relevant to takeoff and departure operations.

Note: Per FAA OpSpecs, air carrier takeoff operations below 1600 Runway Visual Range (RVR) are only permitted with certain limitations and provisions. Title 14 of the Code of Federal Regulations (14 CFR) part 91 operators are not restricted in the same manner, but should be trained to understand the hazards associated with departing in a low visibility environment, as well as possible safety mitigations.

4.2.2 Airwork. Emphasis should be placed on HUD unique symbology (i.e., flight path, flight path acceleration, airspeed error tape, Angle of Attack (AOA) limit bracket, and excessive pitch chevrons). When this training is complete, the trainee should have a thorough understanding of the relationship between aircraft flight path parameters and the HUD symbology.

4.2.3 Visual Approaches. Emphasis should be placed on the HUD symbology relevant to approach and landing operations and optimizing circling approach techniques and procedures. Approaches should begin beyond 3 nautical miles (NM) to the runway threshold.

Note: Approaches should be flown at various airports with dissimilar runway lighting systems.

4.2.4 Instrument Approaches. Emphasis should be placed on the pilot’s ability to transition from utilizing the HUD during approach to using outside visual cues for landing. Instructors should demonstrate failures and incorrect settings on approach (e.g., incorrect runway elevation, airspeed, inbound course). Instructors should also demonstrate unique symbology characteristics in windshear conditions (e.g., erratic
wind speed and direction, flight path acceleration, airspeed errors) All required instrument approaches should be begin outside the Final Approach Fix (FAF).

4.2.5 Additional Operational Considerations. Following initial training, pilots should gain proficiency utilizing the HUD in Visual Meteorological Conditions (VMC) prior to utilizing the HUD in low visibility operations. Although part 91 operators are not required to comply with air carrier requirements, it is worth noting the additional experience required by air carriers to utilize the HUD in line operations.

4.2.6 In all cases, air carrier operators must comply with their OpSpecs regarding authorization to conduct HUD operations. Although requirements may differ, typically air carrier pilots are required to complete OE within 60 days of completing HUD training.

4.3 Multiple Curricula Training Programs (reduced planned hour training programs). The FSB has determined that the Rockwell or FalconEye HUD systems installed in the DA-2EASy share common characteristics with the same HUD system installed in the DA-EASy (all variations). It may be possible, in accordance with FAA Order 8900.1, Volume 3, Chapter 19, Section 1, Scope, Concepts, and Definitions, to develop reduced planned hour HUD training programs for pilots who hold a DA-EASy type rating and have completed training in the respective HUD system.

5. Pilot Checking

Pilot checking requirements are dependent upon the training program objectives and operational parts and will be defined by each training program.

6. Pilot Recurrent Training

For pilots who have previously completed HUD initial training, in conjunction with a Pilot in Command (PIC) proficiency check required by 14 CFR parts 61, 121, or 135, a PIC must demonstrate proficiency using the appropriate HUD system.

7. Operational Suitability

The FSB has evaluated the DA-2EASy Rockwell Collins HGS 4860 and 4860i and the FalconEye and find them operationally suitable for HUD operations under 14 CFR parts 91, part 91 subpart K (part 91K), 121, and 135.

The FSB has also evaluated the DA-2EASy Rockwell Collins HGS 4860 and 4860i for use in Special Authorization (SA) CAT I and SA CAT II operations and found it operationally suitable under parts 91, 91K, 121, and 135. For SA CAT I and SA CAT II operations with the HUD, the crew must be CAT II or CAT III qualified using the HUD. Dassault Aviation CODDE 2 procedures should be followed.
APPENDIX 5. HUD WITH ENHANCED FLIGHT AND/OR SYNTHETIC VISIONS SYSTEMS

1. Background

This appendix addresses Head-Up Display (HUD) systems with additional capabilities, including Enhanced Flight Vision Systems (EFVS), Synthetic Vision Systems (SVS), or a combination of the two. Specifically, this pertains to Rockwell Collins Head-Up Guidance System (HGS) 4860 and 4860i, and the FalconEye HUD installed in the DA-2EASy (all variations).

The operational goal of EFVS and SVS is to improve aviation safety during operations at night and in low visibility conditions due to weather or other environmental factors. Pilots using EFVS and SVS should be careful not to conclude that the flight path is free of hazards merely because none are visible in the HUD. In some situations, imaging sensor performance can be variable and unpredictable.

The requirements in this report are for the use of this equipment for situational awareness. As of the publication of revision 7, these HUD systems with EFVS have not been evaluated, and are not approved for operational credit, and may not be used for visual advantage during instrument approach operations under Title 14 of the Code of Federal Regulations (14 CFR) part 91, § 91.176 [formally § 91.175 (l) and (m)]. However, once approved, the training requirements defined in 14 CFR part 61, § 61.66 must be completed prior to taking operational credit for EFVS equipment when conducting operations below Decision Altitude (DA) or Minimum Descent Altitude (MDA) or for applying visual advantage.

2. Pilot Type Rating

Not applicable.

3. Related Aircraft

Not applicable.

4. Pilot Training

In order to use a HUD system with advanced features, pilots must first be trained to conduct HUD operations. See Appendix 4 for HUD training requirements. Training centers may develop courses that combine HUD and EFVS/SVS training.

For operational approval, system limitations, normal operating procedures, and Abnormal/Emergency procedures, refer to the respective Airplane Flight Manual (AFM) supplement, CODDE, and Quick Reference Handbook (QRH).
All EFVS and SVS training can be conducted as a standalone course or integrated into any training curriculum (i.e., initial, transition, upgrade, recurrent). If part of a curriculum, the Flight Standardization Board (FSB) recommends conducting this training early to allow as much use of the system as practical during the remaining training.

Flight training is required and must be provided in an aircraft, or an FAA-approved simulator qualified to Level C with a daylight visual system, or to Level D, with the appropriate HUD system installed. The EFVS standards must at least meet the requirements contained in the Guidance Bulletin 03-03, Enhanced Flight Vision System (EFVS) FSTD Qualification, issued by the FAA National Simulator Program (NSP) (AFS-205) or any other relevant regulation.

The simulator provides the ideal EFVS training environment and its use is preferred for this training. Simulators provide the ability to change training locations, set specific weather minimums, and change weather rapidly and significantly to provide a greater variety of training situations. They also provide the ability to freeze the training, allowing the student to positively identify the differences between enhanced and natural vision at key times. Aircraft training is acceptable, but operators need to understand and account for these limitations. Pilots must also be aware that the visual contrast in simulators is often better than in the aircraft.

When able, training should be conducted to/from airfields with a mountainous environment in order to demonstrate the benefit of various technologies (e.g., St. Johns, Newfoundland, Canada (CYYT), Aspen, Colorado (KASE)).

The recommended duration of ground training is 4 hours. The recommended duration of flight training per crew position is 2 hours. However, pilots who have completed Pilot Flying (PF) (i.e., left seat) training need not complete any Pilot Monitoring (PM) training since callouts in the PM position remain the same regardless of HUD use. Training centers may develop courses that consider prior HUD experience to reduce the duration requirement.

A list of applicable regulation requirements should be displayed for the trainees (e.g., 14 CFR § 91.176 and part 135, § 135.225).

4.1 EFVS.

In order to use the EFVS in Instrument Meteorological Conditions (IMC), the PF and PM should complete an approved training program meeting the specifications below. The training program should primarily focus on the PF, but PM indoctrination and training is also essential. Where there are procedural differences for the PM when the PF is using the HUD, training of PM duties in the right seat is required. Operating procedures described in DA-2EASy CODDE 2 should be used as a reference concerning the crew tasks allocations, callouts, and recommended displays of Enhanced Vision System (EVS) image. Focus must be made on crew coordination, especially concerning the minima annunciation (unless the operator has a specific approved procedure).

All EFVS training should address the following Areas of Special Emphasis:

4.1.1 Infrared (IR) theory and associated limitations. The PF should be made aware of the general IR theory and the characteristics of the EFVS image, including the
dependency of the image on the weather conditions, thermal crossover (not exhaustive). The trainee should be made aware of the effect of rain (roman candles …) which may degrade the EFVS image and require it to be removed.

4.1.2 Low altitude flight maneuver. Under certain meteorological conditions (night clear sky) the quality of the image gives the PF the impression that he or she can fly the aircraft trajectory through the image. The PF should be made aware that this is false. Furthermore, in bad weather conditions, if the aircraft trajectory was flown through the image, the PF would have a natural tendency to «dive» into the runway. Some approaches not aligned along the runway axis would necessitate low altitude flight maneuvers to recover runway axis, which is to be avoided using the image.

4.1.3 Precision Approach Path Indicator (PAPI) lights. The PF should be made aware about PAPI indication through the EFVS: PAPI always shows four white lights in HUD/EVS image, indicating HIGH even if the aircraft is on the correct descent slope, which could make the PF descend for the 2 RED/2 WHITE, which never appears.

4.1.4 Crosswind approaches. The PF should be made aware of the characteristics of the EFVS display during approaches made in crosswind.

Note: For the purposes of this section, the acronyms “EFVS” and “EVS” are used synonymously.

4.2 Rockwell Collins HGS 4860 and 4860i with EFVS.

4.2.1 HUD. See Appendix 4 for HUD training recommendations.

4.2.2 EFVS. Ground and flight training should include the elements in § 61.66 (a)(2) and (b)(2) and the current edition of FAA Advisory Circular (AC) 90-106, Enhanced Flight Vision Systems, as applicable.

4.2.3 General. Training should include:

a. The DA-2EASy operational documentation and procedures related to the Model 4860/4860i (i.e., CODDE 1, 2, 3, AFM, Master Minimum Equipment List (MMEL)) including:
   i. Limitations.
   ii. Tasks and callouts.
   iii. Pilot controls and operational recommendations.

b. Rockwell Collins Model 4860/4860i handbook.

4.2.4 Areas of special emphasis. Training should emphasize the following:
a. No deviation from standard escape procedures. The pilot must be made aware that EVS image may not be used to deviate from standard escape procedures contained in Dassault Aviation Limitations, Operating Procedures, and Performances, when Enhanced Ground Proximity Warning System (EGPWS), Traffic Alert and Collision Avoidance System (TCAS), or Windshear warnings are triggered.

b. Crew coordination. PM in right seat should be trained with a PF in the left seat during the EVS pilot training course. Concerning human factors, to avoid tunnel effect or any other anomalies affecting the PF’s perception, the task of the PM is very important in the final approach phase when the real scene appears through the EVS image. The callouts from both pilots during this phase of flight are critical.

c. Visual contrast in full flight simulator (FFS) compared to in aircraft. Pilots must be advised that the visual contrasts in the FFS are better than those in the aircraft.

4.2.5 Equivalence between Model 4860 EFVS and Model 4860i EFVS. For pilots who have trained and qualified on Model 4860 EFVS, the FSB has determined Level B training for model 4860i. This differences training applies to models that are both equipped with EFVS. Differences training should include:

a. The DA-2EASy operational documentation and procedures related to the Model 4860i EVS (i.e., CODDE 1, 2, AFM, MMEL) including:

i. Updated limitations.

ii. Updated tasks and callouts.

iii. Recommendations in terms of:

   - Sensor mode selection (HIGH vs. LOW).

   - HUD brightness and contrast settings.

b. Design modifications review. Design modifications from the Model 4860 EFVS to the Model 4860i EFVS should be presented, specifically:

i. IR sensor modifications.

ii. Introduction of a new sensor mode (HIGH/LOW instead of Auto). Benefits of the new LOW mode should be explained (designed to prevent from image saturation when approaching high-intensity lighting systems – enabled to remove the automatic diming in the HUD).

iii. Simplified Calibration logic (only long CAL remains, from initial short/long CALs).
a. HGS modifications:

i. New EVS status labels (EVS ON, EVS DIM...) designed to improve pilot’s awareness of the system status.

ii. Infrared (IR) image diming logic changes (no more automatic diming above DA/MDA, introduction of a manual diming logic, intended to ease EVS operation at low altitude, such as during flare).

iii. Slight increase in the IR image brightness in the HUD.

iv. IR image kill/dim logics, associated to the LH pilot’s yoke EVS switch.

b. Areas of special emphasis in section 4.2.4.

4.3 FalconEye HUD/SVS/EVS/Combined Vision System (CVS). In addition to providing flight guidance information, the FalconEye HUD system combines synthetic, database-driven terrain mapping (SVS) along with thermal and low-light camera images (EVS) to provide additional information to increase the pilot’s situational awareness. In order to ensure that pilots are able to safely operate the HUD in all phases of flight, training must include detailed information on the following:

4.3.1 HUD. See Appendix 4 for HUD training recommendations. Training centers may develop courses that consider prior HUD experience to reduce the duration requirement.

4.3.2 EVS. Ground and flight training should include the elements in § 61.66 (a)(2) and (b)(2) and the current edition of FAA AC 90-106, as applicable.

4.3.3 SVS:

a. SVS concepts.

b. Database information.

i. Terrain.

ii. Obstacles.

iii. Airports and other ground features.

c. Display symbology.

d. Pilot controls (control panel, yoke, high/low selector) and recommended settings.

4.3.4 CVS:

a. CVS concepts.
b. System architecture.

c. Pilot controls and recommended settings.

4.3.5 Areas of special emphasis:

a. Crew coordination. PM in right seat should be trained with a PF in the left during the EVS/SVS/CVS pilot training course. Concerning human factors, to avoid tunnel effect or any other anomalies affecting the PF’s perception, the task of the PM is very important in the final approach phase when the real scene appears through the EVS/CVS image. The callouts from both pilots during this phase of flight are critical.

b. No deviation from standard escape procedures. The pilot must be made aware that SVS/EVS/CVS image shall never be used to deviate from standard escape procedures contained in Dassault Aviation Limitations, Operating Procedures, and Performances, when EGPWS, TCAS, or Windshear warnings are triggered.

c. LH pilot perception of weather conditions. Crew must be aware that the display of an SVS or CVS image in the HUD may impair LH pilot vision of weather conditions.

d. HUD/EVS yoke controls. Crew must be proficient at using without confusion the desired FalconEye HUD/EVS control on the LH yoke.

e. SVS Runway Clear Zone activation. Crew must be aware that the SVS Runway Clear Zone is not activated in HUD until V-Speeds have been sent to EASy (via the Send soft key in the Flight Management Window (FMW) Landing Data tab). Otherwise, outside visual references or EVS image could be masked by the SVS image.

f. EVS contrast setting. PF must be proficient at using EVS contrast settings in order to improve the rendering of EVS image details in various lighting and weather conditions.

g. Possible misalignment cases. Crew must be aware that the conformal runway may not exactly coincide with the real runway: crew should be ready to remove it when visual cues are to be acquired. Also, SVS image may be shifted: although SVS image and conformal runway can be removed, shifted runway axis remains.

4.4 Flight Operations Following Training Completion.

4.4.1 Due to the significant amount of information presented on the FalconEye HUD with EVS/SVS/CVS, the FSB recommends that pilots limit FalconEye use in flight until the following in-aircraft flight experience using the FalconEye is completed in sequence:

a. Approximately 5 hours above FL 180, then
b. Approximately 5 hours below FL 180, then

c. Five takeoffs, five approaches (including satellite (i.e., Area Navigation (RNAV)) and ground-based (i.e., ILS) procedures), and five landings in Visual Meteorological Conditions (VMC).

4.4.2 Training courses should include these recommendations and encourage pilots to increase their proficiency prior to conducting takeoffs, approaches, and landings in low Instrument Meteorological Conditions (IMC).

4.5 Multiple Curricula Training Programs (reduced planned hour training programs). The FSB has determined that the Rockwell or FalconEye HUD systems installed in the DA-2EASy share common characteristics with the same HUD system installed in the DA-EASy (all variations). It may be possible, in accordance with FAA Order 8900.1, Volume 3, Chapter 19, Section 1, Scope, Concepts, and Definitions, to develop reduced planned hour HUD training programs for pilots who hold a DA-EASy type rating and have completed training in the respective HUD system.

5. Pilot Checking

At the completion of the ground school segment, each trainee should be evaluated through a written test, checking the successful completion of the training performance objectives in compliance with the applicable regulations.

Additional pilot checking requirements are dependent upon the training program objectives and operational parts and will be defined by each training program.

6. Pilot Currency

While the AFM establishes no explicit requirement regarding continuing qualification, it is strongly recommended that pilots use the EFVS, SVS, and/or CVS frequently enough in flight to retain proficiency in its operation. HUD, EFVS, and SVS proficiency can be maintained if all are used on a regular basis. Apart from the requirements listed in this Appendix, EFVS, SVS, and/or CVS training should emphasize the need to perform HUD, EFVS, SVS, and/or CVS operations as regularly as possible during normal operations, especially during takeoff, approach, and landing phases of flight.

Procedures should be addressed in recurrent training.

7. Operational Suitability

The FSB has evaluated the Rockwell Collins HGS 4860 and 4860i with EFVS and the FalconEye (HUD/SVS/EVS/CVS) and find them operationally suitable for HUD operations with EFVS and/or SVS under parts 91, 91K, 121, and 135.
APPENDIX 6. AUTOBRAKE SYSTEM

1. Background

The autobrake system is designed to perform an automatic maximum braking action as soon as two main landing gears are sensing weight on wheels during landing. As soon as the nosewheel gear is on ground, the pilot disconnects the autobrake system by fully depressing the brake pedals according to the CODDE 2 LANDING procedures. The use of the autobrake system is limited to landings after normal approaches, and landing after steep approaches at 5.5 degrees.

When the autobrake system is activated, landing distances are reduced 5% on normal approaches. For performance considerations on steep approaches, refer to Airplane Flight Manual (AFM) Supplement number 7, part 2.

Due to the addition of inboard leading edge slats on the LXS and S, and the resultant lower landing reference speeds, the autobrake system is not necessary to ensure adequate landing distance performance. The autobrake system is not installed on these variations so they are excluded from this appendix.

2. Pilot Type Rating

Not applicable.

3. Related Aircraft

Not applicable.

4. Pilot Training

4.1 Prerequisite. No prerequisite is required before entering the autobrake system pilot course, except current type rating on the airplane or full type rating training on the airplane up to but excluding the check ride.

4.2 Operator Differences Requirements (ODR) Tables. ODR table from F2000EX EASy/DX/LX to F2000EX EASy/DX/LX with Modification M3177, M3137, M3138 is published in Dassault Aviation document DGAC09DSOF086 available from the DA-2EASy Flight Standardization Board (FSB) Chair and must be taken into account to design the associated pilot training course, in addition to the following paragraphs.

4.3 Areas of Special Emphasis. Training should emphasize the following:

4.3.1 Specificities of the F2000EX EASy autobrake system compared to other aircraft manufacturers autobrake system: the autobrake system should be disengaged by the pilot at nosewheel touchdown in order to deal with an autobrake system failure at landing.
4.3.2 Structural maximum landing weight (MLW) limitation: 30,000 lb (maximum allowable stress on the nose landing gear strut at touchdown).

4.3.3 The check of the autobrake status light in the Before Landing do-list, even if the autobrake has not been activated, in order to comply with the structural MLW.

4.3.4 The activation of the autobrake system is a necessary condition to obtain the minimum landing distance; however, all other relevant limitations must be considered (refer to AFM Supplement number 7, part 1, page 2).

4.3.5 The position of the pilot feet on the top of the brake pedals in order to be able to disengage the autobrake at nosewheel touchdown on landing.

4.3.6 The requirement of the normal procedure to fully depress the brake pedals at nosewheel touchdown. This will lead to a maximum performance braking and the disengagement of the autobrake.

4.3.7 The requirement of the normal procedure to use the nosewheel steering at the nosewheel touchdown in order to keep the center line.

4.4 Flight Training. Training should include:

4.4.1 Minimum of three normal approaches (3 degrees glide slope) per pilot:

4.4.2 Two full stop landings with autobrake active.

4.4.3 One missed approach with an autobrake failure.

4.4.4 London City, London (EGLC) training. In order to operate to EGLC, the pilots must receive training in addition to the training described. The simulator training for the London City (EGLC) 5.5 degrees steep approach must include at least:

a. Two full stop landings with autobrake active.

b. One missed approach with autobrake active.

c. One approach with an autobrake failure.

5. Pilot Checking

Pilot checking requirements are dependent upon the training program objectives and operational parts and will be defined by each training program.
6. Pilot Currency

To maintain currency, each pilot must conduct two full stop landings as the Pilot Flying (PF) using the autobrake system within any consecutive 12-month period either in the airplane or a simulator.

If autobrake system currency has not been maintained, the pilot may reestablish currency by completing two full stop landings as the PF using the autobrake system. If these landings are performed in an airplane, no passengers should be carried.

7. Operational Suitability

The FSB has evaluated the autobrake system and finds it operationally suitable for operations under Title 14 of the Code of Federal Regulations (14 CFR) parts 91, part 91 subpart K (part 91K), 121, and 135.
1. Background

A Flight Standardization Board (FSB) was convened in October 2011 and January 2012 to evaluate operational suitability and to determine training, checking, and currency requirements for conducting steep approach landing operations for aircraft on the A50NM Type Certificate Data Sheet (TCDS). Supporting regulatory material is the FAA Issue Paper (IP) AEG-O-8, Operational Suitability.

FSB members completed the simulator portion of the evaluation at CAE’s Morristown, NJ, and Dallas, TX, locations along with FSI’s Moonachie, NJ, and Paris, France, locations. The flight portion of the evaluation was done at Dassault Aviation’s facilities in Istres, France. Certification activities were conducted together with FSB evaluation.

Steep approach landing operations in the DA-2EASy are defined as those glide paths greater than 4.5 degrees. The maximum glide path is noted in the Airplane Flight Manual (AFM) limitations. Dassault Aviation modifications for steep approach landing operations are defined by Modification 5649.

The FSB evaluation included numerous steep approach landing operations, both on the full flight simulator (FFS) and on the actual aircraft. London City airport (EGLC) was only flown on the FFS, and Lugano airport (LSZA) was flown both on the full motion simulator and with the actual aircraft. Some steep approach landing operations were also flown with the actual aircraft in Istres (LFMI).

Steep approach landing operations were conducted during day conditions using either 5.5 (similar to London City, London, England) or 6.65 degree approach angles (similar to Lugano, Switzerland). Glide path abuse cases, up to 2 degrees higher than the desired approach angle up to 8.65 degrees, were conducted. Speed abuse cases (-5 kts of target speed) were also conducted, but never in conjunction with the glide path abuse cases. All engines operative and one-engine inoperative steep approach landing operations were flown, terminating either with a landing, execution of a missed approach, or balked landing procedure. Inadvertent touchdown during balked landings was evaluated. Although steep approach landing operations must be conducted with all engines operative, the FSB evaluated piloting skills required to perform a one-engine inoperative extraction should an engine fail at or below Decision Altitude (DA).

The first case of steep approach procedure (London City-like) requires following the requested glidepath angle from the initial approach fix/glide slope intercept to touchdown. The second case of steep approach procedure (Lugano-like) requires following a steep gldepath with a transition to intercept a shallower path based on a Visual Glide Slope Indicator (VGSI) or electronic (internal or external) glidepath.

The FSB has determined that the conduct of steep approach landing operations requires no higher piloting skill level than of normal (3 degree) approaches. However, since steep approach landing operations are often tailored to demanding airports – located in mountainous
areas, short runways – the FSB requires academic and flight training for competency in conducting steep approach landing operations.

This FSB report does not constitute operational approval for the execution of steep approaches. Be advised, it is common that individual airport authorities have training and documentation requirements specific to their airfields with regard to steep approaches.

2. Pilot Type Rating

Not applicable.

3. Related Aircraft

Not applicable.

4. Pilot Training

4.1 Prerequisites. Unless steep approach training is integrated with or occurs sequentially preceding an initial qualification pilot proficiency check, a prerequisite to steep approach training in the applicable type Falcon is prior training, qualification, and currency in the same type Falcon aircraft. Definition of “type” for this training is considered the specific type rating. Any Pilot in Command (PIC)/Second in Command (SIC) who has been properly qualified under Title 14 of the Code of Federal Regulations (14 CFR) part 61, § 61.55, part 91 subpart K (part 91K), part 121, or part 135 may conduct steep approach landing operations provided the training, checking, and currency requirements of this appendix have been satisfactorily accomplished.

4.2 Ground Training. The following areas should be included in the training and is appropriate to any aircrew position:

4.2.1 AFM Annex and CODDE2 review to include:

   a. Limitations.
   b. Abnormal procedures.
   c. Emergency procedures.
   d. Normal procedures.
   e. Performance with special emphasis on increased landing distance.

4.2.2 Stages of the steep approach to include:

   a. Stabilized approach concept as a key success for steep approach landing.
4.2.3 Comparison of the steep approach sight picture to that of 3 degree (normal) approach.

4.2.4 Pilot techniques to include avoidance of abrupt control inputs and ground rush illusion.

4.2.5 Identification of airports with steep approaches to include the specificity of airports with steep approach (e.g., the landing distance safety factor for London City airport).

Note: Operations into London City may require autobrake training. See Appendix 6 for more details.

4.2.6 Discussion of inadvertent airbrake auto-retraction due to stall protection features. The stall protection system automatically retracts the airbrakes when the aircraft approaches a stall condition. During a steep approach, the airspeed margin between $V_{\text{REF}}$ and stall protection activation is often decreased, which increases the likelihood of activating the stall protection. Since steep approach procedures require the use of airbrakes, it’s possible that the stall protection system automatically retracts the airbrakes, particularly during gusty conditions or aggressive pitch application. Pilots must be trained to recognize an auto-retraction of the airbrakes and should consider ramifications and possible actions if the airbrakes automatically retract during the approach or the landing flare (e.g., effect on landing distance, redeployment of airbrakes, missed approach).

4.3 Flight Training. Flight training for either aircrew position may be conducted in either a simulator or aircraft. Training must include steep approaches with and without the flight director displayed. Include use of the Head-Up Display (HUD) if equipped.

4.4 Training completed in one variation of the DA-2000EX EASy is adequate for all variations.

4.5 Multiple Curricula Training Programs (reduced planned hour training programs). The FSB has determined that steep approach operations in the DA-2EASy share common characteristics with the steep approach operations in the DA-EASy. It may be possible, in accordance with FAA Order 8900.1 Volume 3, Chapter 19, Section 1, Scope, Concepts, and Definitions, to develop reduced planned hour steep approach training programs for pilots who hold a DA-EASy type rating and have completed steep approach training.

5. Pilot Checking

Pilot checking requirements are dependent upon the training program objectives and operational parts and will be defined by each training program.
6. Pilot Recurrent Training

The FSB recommends, regardless of the number of steep approaches completed, a review of all academic and flight training items be accomplished annually and documented in a manner acceptable to the Administrator.

7. Operational Suitability

The FSB has evaluated two cases of steep approach procedures and found that Falcon 2000EX EASy and variations were operationally suitable under parts 91, 91K, 121, and 135 with aircrew trained in accordance with the requirements set in this appendix.
APPENDIX 8. CLOSE-IN NOISE ABATEMENT DEPARTURE PROCEDURE

1. Background

Since some airports that are requiring a steep approach procedure may also require a noise abatement departure procedure, the Flight Standardization Board (FSB), at the request of Dassault Aviation, has also evaluated a close-in Noise Abatement Departure Procedure (NADP) developed by Dassault Aviation.

The NADP, as evaluated by the FSB, requires a thrust reduction at 400 feet Above Airport Level (AAL) after takeoff (see CODDE2).

2. Pilot Type Rating

Not applicable.

3. Related Aircraft

Not applicable.

4. Pilot Training

See CODDE2.

Training completed in one variation of the DA-2000EX EASy is adequate for all variations.

5. Pilot Checking

Pilot checking requirements are dependent upon the training program objectives and operational parts and will be defined by each training program.

6. Pilot Currency

Not applicable.

7. Operational Suitability

This procedure has been found suitable by the FSB for operations under Title 14 of the Code of Federal Regulations (14 CFR) parts 91, part 91 subpart K (part 91K), 121, and 135, and does not contradict the current edition of FAA Advisory Circular (AC) 91-53, Noise Abatement Departure Profiles.
APPENDIX 9. EASY II AVIONICS

1. Background

This appendix to the Flight Standardization Board (FSB) report is for the Honeywell Enhanced Avionics System (EASy) II avionics upgrade to the Dassault Falcon 2000EX EASy series aircraft.

Dassault Aviation has developed an upgrade to the current Honeywell avionics suite in the Falcon aircraft designated as EASy aircraft. This upgrade will be an option that may be purchased by operators with options within the upgrade that may be purchased individually. The operational suitability evaluation incorporated all options available at the time of certification of this product and the FSB found them operationally suitable when operated by crewmembers trained and qualified according to the provisions of this FSB report appendix.

The following Major EASy II avionics functions were evaluated:

- Automatic Dependent Surveillance - Broadcast (ADS-B) Out.
- Runway Awareness Advisory System (RAAS).
- Paperless Charts.
- Localizer Performance with Vertical guidance (LPV) approach capability.
- Synthetic Vision System (SVS).
- XM™ graphical weather display.
- Air Traffic Control (ATC) datalink.

For United States registered aircraft, the Airplane Flight Manual (AFM) Supplement for this installation restricts EASy II use to qualified pilots who have been trained in accordance with the requirements listed in this FSB report. Ground school training, procedures training, and simulator training is required unless a Multiple Curricula Training Program (reduced planned hour training program) exists (see paragraph 4.7 of this appendix).

The FSB utilized and evaluated a level 6 flight training device (FTD) for this specific training and determined that the fidelity and installed visual system of a level 6 training device is sufficient. However, any FTD or full flight simulator (FFS) used for training, checking, or currency is required to be qualified by the National Simulator Program (NSP) and approved for the associated training by the Training Program Approval Authority (TPAA).

All training conducted in Falcon 2000EX EASy series aircraft that require the use of Desktop Simulation (DTS), Graphical Flight Simulation (GFS), Instrument Procedures Trainers (IPT), or FFS for either EASy I or EASy II modifications must represent the appropriate modification being taught, except under the provisions detailed in this appendix.
2. **Pilot Type Rating**

Not applicable.

3. **Related Aircraft**

Not applicable.

4. **Pilot Training**

In addition to the requirements for ground, procedures, and flight training identified in this appendix, to serve as a pilot on an aircraft with the EASy II avionics, that pilot must have received a minimum 1 hour of training in Pilot Monitoring (PM) duties, as defined by the appropriate CODDE, in an FTD that meets the requirements of the current edition of FAA Advisory Circular (AC) 120-53, Guidance for Conducting and Use of Flight Standardization Board Evaluations, for level D training. Typically, the minimum acceptable training media for level D training would be FTD level 6.

Flight training Pilot Flying (PF)/PM considerations. For a pilot that could serve as a Pilot in Command (PIC), the PF flight training must be done from the left seat. The PM training may be accomplished from the right seat. For a pilot that is limited to Second in Command (SIC) privileges, accomplish the PF and PM training from the right seat only.

Dassault Operational Method and Crew Resource Management (CRM) practices will be applied during all phases of training.

4.1 **Ground Training.** To be qualified in either seat position, and to operate as either the PF or PM, in accordance with the provisions of this FSB report, both pilots must have attended 4 hours of ground school training. This ground school training should precede the flight training.

4.1.1 The modules of each of these subjects must be presented in a manner appropriate for a pilot that has little or no experience/knowledge of these technologies.

4.1.2 Description of EASy II options. A general overview of all available options and modifications on the EASy II software is required. The items that need to be covered, but not limited to, are as follows:

a. Basic modifications:

   i. EASy II load.

   ii. Head-Up Display (HUD) upgrade for EASy II.

b. Optional modifications:
i. ADS-B Out.

ii. RAAS.

iii. Paperless charts.

iv. LPV approach capability.

v. SVS.

vi. XM™ graphical weather display.

vii. ATC datalink.

4.1.3 Areas of special emphasis. The following items should be discussed in detail to allow the pilot to understand the capabilities of the EASy II system.

a. Temperature Correction for Glideslope vs. Temperature Correction for Decision Height.

b. LPV/Wide Area Augmentation System (WAAS).

c. Manual computation of $V_{REF}$. In case penalties must be applied to landing performance computations, $V_{REF}$ is only corrected for the approach speed computations, but not during go-around. The crew must therefore be trained to manually compute landing performances.

4.2 Procedures Training. To be qualified in accordance with the provisions of this FSB report to serve as a pilot on an aircraft with the EASy II avionics, that pilot must have received a minimum 2 hours of training with a device that meets the requirements of the current edition of FAA AC 120-53 for level C training. Typically, the minimum acceptable training media for level C training is interactive computer-based training (CBT), cockpit systems simulators, or cockpit procedures trainers.

4.2.1 Training device. The training device used for procedural training should meet the requirements of the current edition of FAA AC 120-53 for level C training. If a training device is used that has visuals for flight, these visuals should not be used, as they will provide a distraction for this segment of training. Additionally, the training should not be conducted in a manner that requires the pilot to manipulate the controls for the purpose of flight. This allows the pilot trainee to concentrate on the lesson versus flying the aircraft.

4.2.2 Training elements. The training elements must include, but are not limited to, the following:


b. Avionics Window – Autospeeds Tab.


g. Primary Display Unit Windows.

h. Low/high altitude transition.

i. Permanent Radio Bar Very High Frequency (VHF) Tab.


k. Avionics malfunction.

l. HUD.

m. Vertical Navigation Mode (VNAV).

4.3 Flight Training. To be qualified in accordance with the provisions of this FSB report to serve as a pilot on an aircraft with the EASy II avionics, that pilot must have received a minimum 2 hours of training as PF, as defined by the appropriate CODDE.

4.3.1 Training device. The training device used for flight training should meet the requirements of the current edition of FAA AC 120-53 for level D training. Typically, the minimum acceptable training media for level D training would be FTD level 6.

4.3.2 Training elements. The training elements must include, but are not limited to, the following:

a. Low visibility surface operations.

b. Crosswind takeoffs and landings.

c. Instrument departure procedure.

d. Flight director (FD), autopilot, and autothrottle procedures.

e. Steep turns.

f. Stalls - clean configuration stall prevention and recovery.

g. Unusual attitude recovery (nose high and low).

h. Descent.
i. Precision approaches.

j. Non-precision approaches.

k. Missed approach.

   i. It is strongly recommended that EASy II initial programs incorporate autothrottle inoperative during go-around scenarios to help facilitate the limitation of EASy I aircraft.

   ii. Fly the entire missed approach procedure, or until established in the published missed approach hold.

l. Holding.

m. Visual approach – time permitting.

4.4 EASy II 2nd and 3rd Certification Training Requirements.

4.4.1 Trainee prerequisites. DA-2EASy pilot type rating, or pilot type rating training up to but excluding the check ride.

4.4.2 Training Area of Special Emphasis (TASE). EASy II Takeoff and Go-Around (TOGA) modes with emphasis in the logic of speed changes, new Takeoff and Landing Data (TOLD) features, and Automatic Descent Mode (ADM).

4.4.3 There are no additional checking or currency requirements.

4.4.4 Master Differences Requirements (MDR) from EASy II 1st certification (Modification M3254) to 2nd certification (Modification M3381/M3627/M3304) and vice versa – B/A.

4.4.5 MDR from 2nd certification to 3rd certification is A/A and vice versa.

4.5 ATC Datalink Training.

4.5.1 ATC datalink functions (both Future Air Navigation 1/A (FANS 1A) and Aeronautical Telecommunications Network (ATN) B1) are part of the EASy II avionics suite. Operators should ensure that flightcrew are thoroughly familiar with all relevant aspects of datalink operations according to the International Civil Aviation Organization (ICAO) Global Operational Data Link Document (GOLD), prior to operation.

4.5.2 Training elements. Training elements must include, but are not limited to:

   a. Messages and user interface used in FANS 1/A and in ATN B1 are similar but not identical.
b. Format of data (Flight Level (FL) and Mach) to be entered in Multipurpose Control and Display Unit (MCDU) is specific and different between FANS 1/A and ATN B1.

c. Complete content of message may not be displayed in first page, and in this case, crew has to look at the other page(s) where a required answer from the crew to the ATC may be displayed (with a specific mention that the acknowledge key for Oceanic Clearances is visible on first page).

d. It is recommended that the PM displays the page in his or her Pilot Display Unit (PDU) and not in the Multifunction Display Unit (MDU) shared area.

e. There is no direct access to Oceanic Clearances via shortcut because Oceanic Clearances is part of a subpage: crew needs to navigate in the page to get the message.

f. There is no automatic handover between FANS 1/A and ATN B1. Handover should follow CODDE2 procedure.

g. FANS 1/A clearance is to be manually loaded in the flight plan (it is not automatic).

4.6 EASy I Crew Training on EASy II Training Devices. It is possible for EASy II Training Devices to be used with EASy I only qualified pilots if a training program is developed to limit the EASy II functionality to simulate the EASy I system.

4.6.1 Training duration. A minimum of 2 hours ground training is required for specific differences from EASy I to the EASy II training device. A minimum of 2 hours of flight training per crewmember is required in a training device that meets the requirements of level D training as defined in the current edition of FAA AC 120-53. Since the 2-hour flight requirement is to allow for 1 hour of training in PF duties and 1 hour in PM duties, the training for two crewmembers can be accomplished concurrently in a 2-hour block.

4.6.2 Noted differences. The following differences listed by Air Transport Association of America (ATA) code must be discussed and/or demonstrated.

   a. ATA 22: Autoflight:
      
      i. Vertical Guidance Path (VGP) indications, arming, and Required Navigation Performance (RNP) indications different.

      ii. Satellite-Based Augmentation System (SBAS) not available.

      iii. LPV not available.

      iv. Vertical guidance mode indications different.
v. Lateral deviation scale different.

vi. Autopilot (AP)/Autothrottle (AT) limitations affected.

vii. No AT engagement after takeoff selectable.

viii. FMS speed logic modified—TOGA button not to be used.

ix. ATs less reactive.

x. Yaw Damper (YD) authority limitation on the ground.

b. ATA 23: Communications:

i. Deselect ADS-B Out.

ii. Controller Pilot Data Link Communication (CPDLC) and Aeronautical Telecommunications Network (ATN) not available.

iii. FANS 1A not available.

c. ATA 31: Indicating and Recording Systems:

i. Disregard second checklist function indications.

d. ATA 34: Navigation:

i. Integrated Primary Flight Display (IPFD) redefined.

ii. Military Primary Radar (FPS) uncaged.

iii. Attitude Director Indicator (ADI)/Horizontal Situation Indicator (HSI) indication differences.

iv. No synthetic vision.

v. Vertical profile discrepancies.

vi. Review flight management (FLT MGMT) differences.

vii. Other FLT MGMT differences (e.g., undue reset of approach minima).

viii. Miscellaneous surveillance differences (e.g., flight ID must be re-entered for each flight).

ix. FMS reset when Airborne Flight Information System (AFIS) uploading a flight plan (FPLN) with airports containing more than 100 Standard Instrument Departures (SID)/Standard Terminal Arrival (STAR) fixes.
x. Different approach types/indication.

xi. No ATC datalink (DTLK) key.

xii. Transponder (XPDR) key replaced with ATC and ATC/Traffic Alert and Collision Avoidance System (TCAS) keys.

xiii. MDU/I-NAV:
   - Avionics TAB tools different.
   - Weather radar (WX) menu modified … no XM™ weather.
   - Atmospheric pressure at aerodrome elevation (QFE)/Barometric pressure for Standard Altimeter Setting (QNH) calculator not available.
   - Baro Mins mandatory entry.
   - TOLD page layout different.
   - Temp compensation not to be used.

xiv. No LPV approach capability.

xv. No RNP approach capability.

xvi. No paperless charts capability. Charts reside in Personal Computer Memory Card International Association (PCMCIA) card and transmits over local area network (LAN).

xvii. Approach minimums require mandatory selection.

xviii. TOLD improvements not to be used.

xix. ORIGIN/DESTINATION remain indicated after insertion for Active & Secondary FPL.

xx. Capability to load RNAV (Global Positioning System (GPS)) -Z, -Y, -X… not to be used.

xxi. RAAS may or may not be part of installation.

4.6.3 Training. Flight training may be conducted in a training device that meets the requirements of level D training as defined in the current version of FAA AC 120-53. Training should include:


b. Review of PDU layout.
c. Review of horizontal situation indicator (HSI) toolbar.
d. Review of MDU layout.
e. Review of I-NAV.
f. Review of Flight Management Window (FMW) - Phase of flight (POF) tabs.
g. Perform flight plan entry.
h. Perform crosswind takeoff to note FPS difference.
i. Execute a localizer (LOC)-based approach.
j. Execute a GPS approach.

4.6.4 Training credit. Time spent training under this paragraph cannot be used for any credit towards any other time requirements set forth in this appendix or any other approved training program.

4.6.5 For pilots who have not previously been qualified on EASy II, this training (EASy I Crew Training on EASy II Device) must be completed prior to all training that requires the use of an EASy II training device, unless the pilot has completed this training within the previous 6 months.

4.7 Multiple Curricula Training Programs (reduced planned hour training programs). The FSB has determined that DA-2EASy EASy II Avionics share common characteristics with the EASy II Avionics in the DA-EASy and DA-7X. It may be possible, in accordance with FAA Order 8900.1, Volume 3, Chapter 19, Section 1, Scope, Concepts, and Definitions, to develop reduced planned hour EASy II Avionics training programs for pilots who hold a DA-EASy or DA-7X type rating and have completed EASy II avionics training.

5. Pilot Checking

Pilot checking requirements are dependent upon the training program objectives and operational parts and will be defined by each training program.

6. Pilot Recurrent Training

The FSB recommends that pilots use all available options of the EASy II system during recurrent simulator training.

The FSB also recommends that LPV/WAAS approaches are conducted with each check or currency event if the pilot is authorized by Operations Specifications (OpSpecs) to do so.
7. Operational Suitability

The FSB has found EASy II avionics, including 1\textsuperscript{st}, 2\textsuperscript{nd}, and 3\textsuperscript{rd} certifications, to be operationally suitable for operations under Title 14 of the Code of Federal Regulations (14 CFR) parts 91, part 91 subpart K (part 91K), 121, and 135.
1. Background

The Flight Standardization Board (FSB) evaluated two additional marketing versions of the DA-2EASy: the 2000LXS and 2000S. See Appendix 3, Differences Tables, for the major changes from previous versions.

2. Pilot Type Rating

The FSB found that these variations are common to the DA-2EASy and will have the same pilot type rating.

3. Related Aircraft

Not applicable.

4. Pilot Training

4.1 FALCON 2000LXS:

4.1.1 For pilots to be authorized to fly the Falcon 2000LXS, training on the Falcon 2000LX EASy II (including Maximum Takeoff Weight (MTOW) increase and new Full Authority Digital Engine Control (FADEC) software, if installed), and a level B training course covering the differences between the Falcon 2000LX EASy II and the Falcon 2000LXS must be taken. Pilots already qualified on Falcon 2000LX EASy II (including MTOW increase and new FADEC software, if installed) will only have to complete the level B differences training course.

4.1.2 The following items should receive special emphasis during the differences training from the base aircraft (Falcon 2000LX EASy II) to the related aircraft (Falcon 2000LXS):

a. Takeoff thrust with one engine inoperative is authorized for 10 minutes maximum (instead of 5 minutes for Falcon 2000EX EASy without FADEC V9 installed by Modification M3453). Execution of ENG.. OUT abnormal procedure has to be anticipated for the cases where the takeoff thrust with one engine inoperative is needed for more than 5 minutes.

b. Takeoff performance calculations (full reverse thrust must be applied in case of rejected takeoff, whether the runway is dry or wet, with one or two engine(s) operative. Aircraft takeoff performance on wet runway is computed with this assumption).

c. Computation and use of wet runway performance landing data.
d. Reference Flap Retract Speed (visual flight rules (VFR)) computation is different for Falcon 2000LXS (VFR = $V_2 + 25$ kts) from other variations (VFR = $V_2 + 10$ kts).

e. Windshear escape guidance is available. For aircraft without windshear guidance (Modification M5023), in case of windshear conditions, the go-around pushbutton should not be pushed because windshear guidance is not available. The pilot must fly the Flight Path Vector (FPV) up to the Angle of Attack (AOA) path limit symbol, as per the Airplane Flight Manual (AFM) procedure. If the windshear warning occurs on final approach, this maneuver requires immediate flap retraction from SF 3 to SF 2.

4.2 FALCON 2000S:

Pilots already qualified on the Falcon 2000LXS will have to complete a level A differences training course covering the Falcon 2000S specific areas (reduction of fuel tank capacity) to be authorized to fly the Falcon 2000S. No checking or currency requirements are required other than those required by Title 14 of the Code of Federal Regulations (14 CFR).

5. Pilot Checking

Pilot checking requirements are dependent upon the training program objectives and operational parts and will be defined by each training program.

6. Pilot Currency

Not applicable.

7. Operational Suitability

The FSB found these variations operationally suitable under 14 CFR parts 91, part 91 subpart K (part 91K), 121, and 135 when operated by crewmembers trained and qualified according to the provisions of this FSB report.