

(1) Communicate in any manner that a director, officer, attorney, employee, or agent of a Bank, directly or indirectly, supports the nomination or election of a particular person for an elective directorship; or

(2) Take any other action to influence votes for a directorship.

#### § 915.16 [Amended]

■ 5. Amend the last sentence of § 915.16(e) by revising the reference “§ 915.8(e)” to read “§ 915.8(f)”.

#### § 915.17 [Amended]

■ 6. Amend the last sentence of § 915.17(b)(1) by revising the reference “§ 915.8(b)” to read “§ 915.8(c)”.

Dated: July 12, 2006.

By the Board of Directors of the Federal Housing Finance Board.

**Ronald A. Rosenfeld,**  
*Chairman.*

[FR Doc. E6-11306 Filed 7-17-06; 8:45 am]

BILLING CODE 6725-01-P

## DEPARTMENT OF TRANSPORTATION

### Federal Aviation Administration

#### 14 CFR Part 25

[Docket No. NM349; Special Conditions No. 25-319-SC]

#### Special Conditions: Dassault Aviation Model Falcon 900EX and Falcon 2000EX Airplanes; Enhanced Flight Visibility System (EFVS)

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Final special conditions; request for comments.

**SUMMARY:** These special conditions are issued for certain Dassault Aviation Model Falcon 900EX and Falcon 2000EX airplanes. These airplanes will have an advanced enhanced flight visibility system (EFVS). The EFVS is a novel or unusual design feature which consists of a head up display (HUD) system modified to display forward-looking infrared (FLIR) imagery. The applicable airworthiness regulations do not contain adequate or appropriate safety standards for this design feature. These special conditions contain the additional safety standards that the Administrator considers necessary to establish a level of safety equivalent to that established by the existing airworthiness standards.

**DATES:** The effective date of these special conditions is July 7, 2006. We must receive your comments by September 1, 2006.

**ADDRESSES:** You must mail two copies of your comments to: Federal Aviation Administration, Transport Airplane Directorate, Attn: Rules Docket (ANM-113), Docket No. NM349, 1601 Lind Avenue, SW., Renton, Washington 98055-4056. You may deliver two copies to the Transport Airplane Directorate at the above address. You must mark your comments: Docket No. NM349. Comments may be inspected in the Rules Docket weekdays, except Federal holidays, between 7:30 a.m. and 4 p.m.

**FOR FURTHER INFORMATION CONTACT:** Dale Dunford, FAA, Transport Standards Staff, ANM-111, Transport Airplane Directorate, Aircraft Certification Service, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-2239; fax (425) 227-1320; e-mail: [dale.dunford@faa.gov](mailto:dale.dunford@faa.gov).

**SUPPLEMENTARY INFORMATION:** The FAA has determined that the substance of these special conditions has previously been subject to the public comment process. These particular special conditions were recently issued and only three non-substantive comments were received during the public comment period. The FAA therefore finds that good cause exists for making these special conditions effective upon issuance.

#### Comments Invited

We invite interested people to take part in this rulemaking by sending written comments, data, or views. The most helpful comments reference a specific portion of the special conditions, explain the reason for any recommended change, and include supporting data. We ask that you send us two copies of written comments.

We will file in the docket all comments we receive, as well as a report summarizing each substantive public contact with FAA personnel about these special conditions. You can inspect the docket before and after the comment closing date. If you wish to review the docket in person, go to the address in the **ADDRESSES** section of this preamble between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

We will consider all comments we receive by the closing date for comments. We will consider comments filed late if it is possible to do so without incurring expense or delay. We may change these special conditions based on the comments we receive.

If you want us to let you know we received your comments on these special conditions, send us a pre-

addressed, stamped postcard on which the docket number appears. We will stamp the date on the postcard and mail it back to you.

#### Background

On August 18, 2004, Dassault Aviation applied for an amendment to the type design for the installation and operation of an infrared enhanced flight visibility system (EFVS) on Model Falcon 900EX airplanes with modification M3083 installed, and Model Falcon 2000EX airplanes with modification M1691 installed. Commercially, these airplanes are identified as the Falcon 900EX EASy and the Falcon 2000EX EASy. In this document, all references to Falcon 900EX EASy and Falcon 2000EX EASy airplanes mean airplanes with the applicable modification installed. The original type certificate for the Model Falcon 900EX airplane is A46EU, revision 13, dated February 27, 2006. The original type certificate for the Model Falcon 2000EX airplane is A50NM revision 3, dated September 21, 2004.

The Dassault Aviation Model Falcon 900EX and Falcon 2000EX are transport category airplanes that operate with a crew of two. The Model Falcon 900EX has a wing span of 63 feet 5 inches, a length of 66 feet 4 inches, a maximum takeoff gross weight of 48,300 pounds, is powered by three Allied Signal Engines TFE 731-60-1C turbofan engines, and has a maximum range of 4,500 nautical miles. The Model Falcon 2000EX airplane has a wing span of 63 feet 5 inches, a length of 66 feet 4 inches, a maximum takeoff gross weight of 41,300 pounds, is powered by two Pratt & Whitney Canada Model PW308C turbofan engines, and has a maximum range of 3,800 nautical miles.

The electronic infrared image displayed between the pilot and the forward windshield represents a novel or unusual design feature in the context of 14 CFR 25.773. Section 25.773 was not written in anticipation of such technology. The electronic image has the potential to enhance the pilot's awareness of the terrain, hazards and airport features. At the same time, the image may partially obscure the pilot's direct outside compartment view. Therefore, the FAA needs adequate safety standards to evaluate the EFVS to determine that the imagery provides the intended visual enhancements without undue interference with the pilot's outside compartment view. The FAA intent is that the pilot will be able to use a combination of the information seen in the image and the natural view of the outside scene seen through the image, as

safely and effectively as a pilot compartment view without an EVS image that is compliant with § 25.773.

Although the FAA has determined that the existing regulations are not adequate for certification of EFVSs, it believes that EFVSs could be certified through application of appropriate safety criteria. Therefore, the FAA has determined that special conditions should be issued for certification of EFVS to provide a level of safety equivalent to that provided by the standard in § 25.773.

**Note:** The term “enhanced vision system” (EVS) has been commonly used to refer to a system comprised of a head-up display, imaging sensor(s), and avionics interfaces that displayed the sensor imagery on the head up display (HUD) and overlaid it with alpha-numeric and symbolic flight information. However, the term has also been commonly used in reference to systems which displayed the sensor imagery, with or without other flight information, on a head down display. To avoid confusion, the FAA created the term “enhanced flight visibility system” (EFVS) to refer to certain EVS systems that meet the requirements of the new operational rules—in particular the requirement for a HUD and specified flight information—and can be used to determine “enhanced flight visibility.” EFVSs can be considered a subset of systems otherwise labeled EVSs.

On January 9, 2004, the FAA published revisions to operational rules in 14 CFR parts 1, 91, 121, 125, and 135 to allow aircraft to operate below certain altitudes during a straight-in instrument approach while using an EFVS to meet visibility requirements.

Prior to this rule change, the FAA issued Special Conditions No. 25–180–SC, which approved the use of an EVS on Gulfstream Model G–V airplanes. Those special conditions addressed the requirements for the pilot compartment view and limited the scope of the intended functions permissible under the operational rules at the time. The intended function of the EVS imagery was to aid the pilot during the approach and allow the pilot to detect and identify the visual references for the intended runway down to 100 feet above the touchdown zone. However, the EVS imagery alone was not to be used as a means to satisfy visibility requirements below 100 feet.

The recent operational rule change expands the permissible application of certain EVSs that are certified to meet the new EFVS standards. The new rule will allow the use of EFVSs for operation below the minimum descent altitude (MDA) or decision height (DH) to meet new visibility requirements of § 91.175(l). The purpose of these special conditions is not only to address the

issue of the “pilot compartment view,” as was done by Special Conditions No. 25–180–SC, but also to define the scope of intended function consistent with § 91.175(l) and (m).

#### Type Certification Basis

Under the provisions of 14 CFR 21.101, Dassault Aviation must show that the Model Falcon 900EX and Falcon 2000EX airplanes, as modified, comply with the regulations in the U.S. type certification basis established for those airplanes. The U.S. type certification basis for the airplanes is established in accordance with §§ 21.21 and 21.17, and the type certification application date. The U.S. type certification basis for the Model Falcon 900EX airplanes is listed in Type Certificate Data Sheet No. A46EU, revision 13, dated February 27, 2006, which covers all variants of the Model Falcon 900 airplanes, including the Falcon 900EX EASy. The U.S. type certification basis for the Model Falcon 2000EX airplanes is listed in Type Certificate Data Sheet No. A50NM, revision 3, dated September 21, 2004, which covers all variants of the Model Falcon 2000 airplanes, including the Falcon 2000 EX EASy.

In addition, the certification basis includes certain special conditions and exemptions that are not relevant to these special conditions. Also, if the regulations incorporated by reference do not provide adequate standards with respect to the change, the applicant must comply with certain regulations in effect on the date of application for the change.

If the Administrator finds that the applicable airworthiness regulations (*i.e.*, part 25 as amended) do not contain adequate or appropriate safety standards for the Dassault Aviation Model Falcon 900EX and Falcon 2000EX, modified by Dassault Aviation, because of a novel or unusual design feature, special conditions are prescribed under the provisions of § 21.16.

In addition to the applicable airworthiness regulations and special conditions, the Dassault Aviation Model Falcon 900EX EASy and Falcon 2000EX EASy airplanes must comply with the fuel vent and exhaust emission requirements of 14 CFR part 34 and the noise certification requirements of 14 CFR part 36.

The FAA issues special conditions, as defined in § 11.19, under § 11.38 and they become part of the type certification basis under § 21.101.

Special conditions are initially applicable to the model for which they are issued. Should the type certificate for those models be amended later to

include any other model that incorporates the same novel or unusual design feature, the special conditions would also apply to the other model.

#### Novel or Unusual Design Features

The Dassault Aviation Model Falcon 900EX EASy and Falcon 2000EX EASy airplanes will incorporate an EFVS, which is a novel or unusual design feature. The EFVS is a novel or unusual design feature because it projects a video image derived from a forward-looking infrared (FLIR) camera through the HUD. The EFVS image is projected in the center of the “pilot compartment view,” which is governed by § 25.773. The image is displayed with HUD symbology and overlays the forward outside view. Therefore, § 25.773 does not contain appropriate safety standards for the EFVS display.

Operationally, during an instrument approach, the EFVS image is intended to enhance the pilot’s ability to detect and identify “visual references for the intended runway” [see § 91.175(l)(3)] to continue the approach below decision height or minimum descent altitude. Depending on atmospheric conditions and the strength of infrared energy emitted and/or reflected from the scene, the pilot can see these visual references in the image better than he or she can see them through the window without EFVS.

Scene contrast detected by infrared sensors can be much different from that detected by natural pilot vision. On a dark night, thermal differences of objects which are not detectable by the naked eye will be easily detected by many imaging infrared systems. On the other hand, contrasting colors in visual wavelengths may be distinguished by the naked eye but not by an imaging infrared system. Where thermal contrast in the scene is sufficiently detectable, the pilot can recognize shapes and patterns of certain visual references in the infrared image. However, depending on conditions, those shapes and patterns in the infrared image can appear significantly different than they would with normal vision. Considering these factors, the EFVS image needs to be evaluated to determine that it can be accurately interpreted by the pilot.

The image may improve the pilot’s ability to detect and identify items of interest. However, the EFVS needs to be evaluated to determine that the imagery allows the pilot to perform the normal duties of the flightcrew and adequately see outside the window through the image, consistent with the safety intent of § 25.773(a)(2).

Compared to a HUD displaying the EFVS image and symbology, a HUD that

only displays stroke-written symbols is easier to see through. Stroke symbology illuminates a small fraction of the total display area of the HUD, leaving much of that area free of reflected light that could interfere with the pilot's view out the window through the display. However, unlike stroke symbology, the video image illuminates most of the total display area of the HUD (approximately 30 degrees horizontally and 25 degrees vertically) which is a significant fraction of the pilot compartment view. The pilot cannot see around the larger illuminated portions of the video image, but must see the outside scene through it.

Unlike the pilot's external view, the EFVS image is a monochrome, two-dimensional display. Many, but not all, of the depth cues found in the natural view are also found in the image. The quality of the EFVS image and the level of EFVS infrared sensor performance could depend significantly on conditions of the atmospheric and external light sources. The pilot needs adequate control of sensor gain and image brightness, which can significantly affect image quality and transparency (*i.e.*, the ability to see the outside view through the image). Certain system characteristics could create distracting and confusing display artifacts. Finally, because this is a sensor-based system intended to provide a conformal perspective corresponding with the outside scene, the system must be able to ensure accurate alignment.

Therefore, safety standards are needed for each of the following factors:

- An acceptable degree of image transparency;
- Image alignment;
- Lack of significant distortion; and
- The potential for pilot confusion or misleading information.

Section 25.773, Pilot compartment view, specifies that "Each pilot compartment must be free of glare and reflection that could interfere with the normal duties of the minimum flight crew \* \* \*." In issuing § 25.773, the FAA did not anticipate the development of EFVSs and does not consider § 25.773 to be adequate to address the specific issues related to such a system. Therefore, the FAA has determined that special conditions are needed to address the specific issues particular to the installation and use of an EFVS.

## Discussion

The EFVS is intended to function by presenting an enhanced view during the approach. This enhanced view would help the pilot to see and recognize external visual references, as required

by § 91.175(l), and to visually monitor the integrity of the approach, as described in FAA Order 6750.24D ("Instrument Landing System and Ancillary Electronic Component Configuration and Performance Requirements," dated March 1, 2000).

Based on this approved functionality, users would seek to obtain operational approval to conduct approaches—including approaches to Type I runways—in visibility conditions much lower than those for conventional Category I.

The purpose of these special conditions is to ensure that the EFVS to be installed can perform the following functions:

- Present an enhanced view that would aid the pilot during the approach.
- Provide enhanced flight visibility to the pilot that is no less than the visibility prescribed in the standard instrument approach procedure.
- Display an image that the pilot can use to detect and identify the "visual references for the intended runway" required by § 91.175(l)(3) to continue the approach with vertical guidance to 100 feet height above the touchdown zone elevation.

Depending on the atmospheric conditions and the particular visual references that happen to be distinctly visible and detectable in the EFVS image, these functions would support its use by the pilot to visually monitor the integrity of the approach path.

Compliance with these special conditions does not affect the applicability of any of the requirements of the operating regulations (*i.e.*, 14 CFR parts 91, 121, and 135). Furthermore, use of the EFVS does not change the approach minima prescribed in the standard instrument approach procedure being used; published minima still apply.

The FAA certification of this EFVS is limited as follows:

- The infrared-based EFVS image will not be certified as a means to satisfy the requirements for descent below 100 feet height above touchdown (HAT).
- The EFVS may be used as a supplemental device to enhance the pilot's situational awareness during any phase of flight or operation in which its safe use has been established.

An EFVS image may provide an enhanced image of the scene that may compensate for any reduction in the clear outside view of the visual field framed by the HUD combiner. The pilot must be able to use this combination of information seen in the image and the natural view of the outside scene seen through the image as safely and

effectively as the pilot would use a pilot compartment view without an EVS image that is compliant with § 25.773. This is the fundamental objective of the special conditions.

The FAA will also apply additional certification criteria, not as special conditions, for compliance with related regulatory requirements, such as §§ 25.1301 and 25.1309. These additional criteria address certain image characteristics, installation, demonstration, and system safety.

Image characteristics criteria include the following:

- Resolution,
- Luminance,
- Luminance uniformity,
- Low level luminance,
- Contrast variation,
- Display quality,
- Display dynamics (*e.g.*, jitter, flicker, update rate, and lag), and
- Brightness controls.

Installation criteria address visibility and access to EFVS controls and integration of EFVS in the cockpit.

The EFVS demonstration criteria address the flight and environmental conditions that need to be covered.

The FAA also intends to apply certification criteria relevant to high intensity radiated fields (HIRF) and lightning protection.

## Applicability

As discussed above, these special conditions are applicable to Dassault Aviation Model Falcon 900EX airplanes with modification M3083 installed (Falcon 900EX EASy) and Model Falcon 2000EX airplanes with modification M1691 installed (Falcon 2000EX EASy). Should Dassault Aviation apply at a later date for an amendment to the type design to modify any other model included on Type Certificates No. A46EU or A50NM to incorporate the same novel or unusual design feature, the special conditions would apply to those models as well.

## Conclusion

This action affects only certain novel or unusual design features on Dassault Aviation Model Falcon 900EX EASy and Falcon 2000EX EASy airplanes modified by Dassault Aviation. It is not a rule of general applicability.

The substance of these special conditions has been subjected to the notice and comment period in several prior instances and has been derived without substantive change from those previously issued. It is unlikely that prior public comment would result in a significant change from the substance contained herein. Therefore, because a delay would significantly affect the

certification of the airplane, which is imminent, the FAA has determined that prior public notice and comment are unnecessary and impracticable, and good cause exists for adopting these special conditions upon issuance. The FAA is requesting comments to allow interested persons to submit views that may not have been submitted in response to the prior opportunities for comment described above.

#### List of Subjects in 14 CFR Part 25

Aircraft, Aviation safety, Reporting and recordkeeping requirements.

■ The authority citation for these special conditions is as follows:

**Authority:** 49 U.S.C. 106(g), 40113, 44701, 44702, 44704.

#### The Special Conditions

■ Accordingly, pursuant to the authority delegated to me by the Administrator, the following special conditions are issued as part of the type certification basis for Dassault Aviation Model Falcon 900EX airplanes with modification M3083 installed (Falcon 900EX EASy) and Model Falcon 2000EX airplanes with modification M1691 installed (Falcon Model 2000EX EASy).

1. The EFVS imagery on the HUD must not degrade the safety of flight or interfere with the effective use of outside visual references for required pilot tasks during any phase of flight in which it is to be used.

2. To avoid unacceptable interference with the safe and effective use of the pilot compartment view, the EFVS device must meet the following requirements:

a. The EFVS design must minimize unacceptable display characteristics or artifacts (e.g. noise, "burlap" overlay, running water droplets) that obscure the desired image of the scene, impair the pilot's ability to detect and identify visual references, mask flight hazards, distract the pilot, or otherwise degrade task performance or safety.

b. Control of EFVS display brightness must be sufficiently effective in dynamically changing background (ambient) lighting conditions to prevent full or partial blooming of the display that would distract the pilot, impair the pilot's ability to detect and identify visual references, mask flight hazards, or otherwise degrade task performance or safety. If automatic control for image brightness is not provided, it must be shown that a single manual setting is satisfactory for the range of lighting conditions encountered during a time-critical, high workload phase of flight (e.g., low visibility instrument approach).

c. A readily accessible control must be provided that permits the pilot to immediately deactivate and reactivate display of the EFVS image on demand.

d. The EFVS image on the HUD must not impair the pilot's use of guidance information or degrade the presentation and pilot awareness of essential flight information displayed on the HUD, such as alerts, airspeed, attitude, altitude and direction, approach guidance, windshear guidance, TCAS resolution advisories, or unusual attitude recovery cues.

e. The EFVS image and the HUD symbols—which are spatially referenced to the pitch scale, outside view and image—must be scaled and aligned (*i.e.*, conformal) to the external scene. In addition, the EFVS image and the HUD symbols—when considered singly or in combination—must not be misleading, cause pilot confusion, or increase workload. There may be airplane attitudes or cross-wind conditions which cause certain symbols (*e.g.*, the zero-pitch line or flight path vector) to reach field of view limits, such that they cannot be positioned conformally with the image and external scene. In such cases, these symbols may be displayed but with an altered appearance which makes the pilot aware that they are no longer displayed conformally (for example, "ghosting").

f. A HUD system used to display EFVS images must, if previously certified, continue to meet all of the requirements of the original approval.

3. The safety and performance of the pilot tasks associated with the use of the pilot compartment view must not be degraded by the display of the EFVS image. These tasks include the following:

a. Detection, accurate identification and maneuvering, as necessary, to avoid traffic, terrain, obstacles, and other hazards of flight.

b. Accurate identification and utilization of visual references required for every task relevant to the phase of flight.

4. Compliance with these special conditions will enable the EFVS to be used during instrument approaches in accordance with § 91.175(l) such that it may be found acceptable for the following intended functions:

a. Presenting an image that would aid the pilot during a straight-in instrument approach.

b. Enabling the pilot to determine that there is sufficient "enhanced flight visibility," as required by § 91.175(l)(2), for descent and operation below minimum descent altitude/decision height (MDA)/(DH).

c. Enabling the pilot to use the EFVS imagery to detect and identify the "visual references for the intended runway," required by § 91.175(l)(3), to continue the approach with vertical guidance to 100 feet height above touchdown zone elevation.

5. Use of EFVS for instrument approach operations must be in accordance with the provisions of § 91.175(l) and (m). Appropriate limitations must be stated in the Operating Limitations section of the airplane flight manual to prohibit the use of the EFVS for functions that have not been found to be acceptable.

Issued in Renton, Washington, on July 7, 2006.

**Ali Bahrami,**

*Manager, Transport Airplane Directorate, Aircraft Certification Service.*

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**BILLING CODE 4910-13-P**

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## DEPARTMENT OF TRANSPORTATION

### Federal Aviation Administration

#### 14 CFR Part 71

[Docket No. FAA-2006-24243; Airspace Docket No. 06-AWP-11]

#### Revocation of Class D Airspace; Elko, NV

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Direct final rule, request for comments.

**SUMMARY:** This action revokes the Class D airspace area for Elko Municipal-J.C. Harris Field, Elko, NV. The FAA is taking this action due to the closure of the Elko Municipal Airport Traffic Control Tower (ATCT).

**DATES:** *Effective Date:* 0901 UTC October 26, 2006.

*Comment Date:* Comments for inclusion in the Rules Docket must be received on or before August 17, 2006.

**ADDRESSES:** Send comments on this direct final rule to the Docket Management System, U.S. Department of Transportation, Room Plaza 401, 400 Seventh Street, SW., Washington, DC 20590-0001. You must identify the docket number FAA-2006-25243/ Airspace Docket No. 06-AWP-11, at the beginning of your comments. You may also submit comments on the Internet at <http://dms.dot.gov>. You may review the public docket final rule, any comments received, and any final disposition in person in the Dockets Office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The