

Appendix A Federal Aviation Administration Runway Safety Area Determinations



U.S. Department
of Transportation

Federal Aviation
Administration

AIRPORTS DISTRICT OFFICE
6020 28th Avenue South, #102
Minneapolis, Minnesota 55450-2706
February 13, 2004

Mr. C. Barry Bateman
Airport Director
Milwaukee County Airport Division
5300 S. Howell Ave.
Milwaukee, WI 53207-6189

General Mitchell International Airport
Milwaukee, Wisconsin
Runway Safety Area Determinations

The Federal Aviation Administration's Runway Safety Area (RSA) Program was established by issuance of Order 5200.8, Runway Safety Area Program, on October 1, 1999. The objective of the Runway Safety Area Program is that all RSAs at federally obligated airports and all RSAs at airports certificated under FAR Part 139 shall conform to the standards contained in Advisory Circular 150/5300-13, Airport Design, to the extent practicable. The RSA is intended to provide a measure of safety in the event of an aircraft's excursion from the runway by significantly reducing the extent of personal injury and aircraft damage during overruns, undershoots and veer-offs.

The Part 139 Airport Certification Safety Inspectors conducted RSA surveys for all runways included in Part 139 Certificates. The Airports District Office staff used that survey information, along with other available information such as airport layout plans and obstruction charts, to prepare a written determination as to whether:

- A. the existing RSA for each runway meets current standards contained in AC 150/5300-13;
- B. the existing RSA does not meet standards but it is practicable to improve the RSA so it will meet current standards;
- C. the existing RSA can be improved to enhance safety, but the RSA will still not meet current standards; or
- D. the existing RSA does not meet current standards and it is not practicable to improve the RSA.

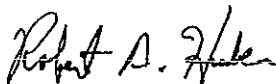
A copy of our determinations for runways at General Mitchell International Airport was sent to you with our letter of October 17, 2000. For your information we are enclosing an additional copy. In our determinations we concluded that it was practicable to improve each of the RSAs such that they will meet current standards. If you do not concur with our determination you may provide a detailed analysis for us to consider which refutes our determination.

After RSA determinations were completed for all Part 139 runways, those runways were identified where the existing RSA is less than 90% of the required standard RSA dimension. These RSAs are being called "targeted" RSAs. Nationally, 422 RSAs fell into that category with 84 of them being in the Great Lakes Region, including the RSAs for Runways 1L/19R, 7R/25L, and 13/31 at GMIA. A national goal has been established to have work initiated on improvements at all 422 RSAs where practicable before the end of Fiscal Year 2007. Such things as completing the necessary environmental documentation or preparing plans and specifications for the RSA improvement could constitute initiating work, as would completing some construction activity that improves the RSA. In the Great Lakes Region, work has already been initiated on nearly 70% of the targeted RSAs. However, we are concerned that no work has been initiated on the three targeted RSAs at GMIA.

We are aware that you are updating your master plan and the RSA situation will be analyzed in this study. We ask that you accelerate the RSA portion of the study. Ultimately you should provide a plan and schedule for improving the RSAs so that they fully comply with the standards in AC 150/5300-13, or if it's not feasible for them to fully comply, provide detailed analysis of what is feasible for the particular RSA and why the required full RSA cannot be provided.

Please provide a draft plan to our office for how you intend to comply with the RSA requirements in 30 days. We realize more details will be added as your master plan update progresses. If you have any questions please contact Sandy DePottey at 612-713-4363.

Sincerely,



Robert A. Huber
Acting Manager
Airports District Office -- Minneapolis

cc: WBOA
AGL-610
AGL-620

ultimate responsibility for ensuring that all existing and future RSA's on your airport comply with current standards lies with the airport owner/operator. We encourage you to take the necessary steps to determine the best approach for bringing the RSA(s) up to current design standards, if practicable, and then proceed to implement the plan. Order 5200.8 requires that an RSA be brought up to current standards, if practicable, whenever a project for a runway involves construction, reconstruction or significant expansion. This does not preclude an airport from implementing projects to improve the RSA in advance of a runway project that involves construction, reconstruction or significant expansion, and we certainly encourage this. The Minneapolis Airports District Office and the Airports Certification Staff (for certificated airports only) will continue to work with you and assist you in your efforts to enhance aviation safety at your airport. If you should have questions regarding this determination, please feel free to contact your Airport Program Manager, Sandy DePottey at 612-713-4363.

Sincerely,
Original Signed By
Robert A. Huber

Robert A. Huber
Assistant Manager
Minneapolis Airports District Office

Enclosure

cc: WBA
AGL-620

Memorandum



U.S. Department
of Transportation

Federal Aviation
Administration

Subject: Runway Safety Area (RSA) Determination, Runway 7R/25L,
General Mitchell International Airport.

Date: 7/13/00

From: Manager, Minneapolis Airports District Office
MSP-ADO-600

Reply to DePottey
Attn. of: 612.713.4363

To: RSA Determination File

REFERENCE DOCUMENTS

Advisory Circular 150/5300-13, current edition.
Airport Layout Plan, dated July 1995
Obstruction Chart, dated May 1993
Aerial Photo, dated September 2, 1999
US Terminal Procedures, dated June 15, 2000

BACKGROUND INFORMATION – This runway is a category D group V runway. The dimensions of Runway 7R/25L are 8,011' long by 150' wide. Runway 25L has a displaced threshold of 672' and is without approach lights and has localizer non precision approach minimums of 500-1. Runway 7R has a SSALR approach lighting system and has straight-in ILS approach minimums of 200-½.

Nav aids located within the RSA include a PAPI on the left side of Runway 25L, a PAPI on the left side of Runway 7R, a REIL on Runway 25L, and a SSALR on Runway 7R. The Runway 25L Localizer is located outside the RSA. The localizer for the 7R approach is inside the RSA.

In accordance with AC 150/5300-13, Table 3-3, the standard runway safety area for this runway has a required width of 500' and a length of 1000' beyond each end of the runway.

Runway 7R/25L was constructed with a railroad 600' from runway end 25L. The runway was designed and constructed to current design standards, including the RSA standards, except for the RSA beyond the approach end of Runways 25L. The full width RSA beyond runway end 25L extends only 600' to the railroad. Also, the localizer is within the RSA due to the location of the railroad. The FAR Part 139 [inspection and /or inventory] will confirm that the remainder of the Runway 7R/25L RSA meets current standards, except for the frangibility of nav aids.

ALTERNATIVES AVAILABLE – N/A

DISCUSSION - N/A

DETERMINATION - Based solely on the review of the above referenced documents, it has been determined that, at this time, the Runway 7R/25L safety area does not meet the current standards contained in AC 150/5300-13, but it is practicable to improve the RSA so that it will meet current standards, except for the frangibility of nav aids. The master plan for the airport shows an extension to the 7R end and shifting the 25L end to provide the full safety area and taking the localizer out of the 25L end. The frangibility of the nav aids identified above, may not conform to the airport design standards for RSA's contained in AC 150/5300-13.


This determination is subject to FAA headquarters determining the practicability of changing the frangibility point for any nav aid identified above that does not meet the 3 inches above grade requirement for a nav aid located within the RSA.

This determination does not reflect a finding that the existing RSA grades and compaction conform to the appropriate grading and compaction requirements.

This determination is subject to the airspace review, environmental finding, and airport layout plan approval for the Runway extension and shifting of the 25L threshold.

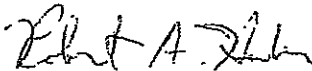
This determination is preliminary and may be revised if additional information becomes available.

Prepared by:



Sandra E. DePottey Date 7/13/2000
Project Manager, MSP-ADO-680.4

Recommended by:



7/17/00

[Robert A. Huber] Date []

Assistant Manager, Minneapolis Airports District Office, MSP-ADO-680

This concurrence is based on our review of the Airway Facilities Division as-built drawings, for the above referenced nav aids, and the applicable national standard drawings. It appears all nav aids within the RSA are constructed with the frangible point at the lowest practical height that it is possible to achieve at this time.

Concurrence by: (Concurrence required only if Nav aids are in the RSA)

[] Date []

Acting Manager, Operations Branch, AGL-470

Approved by:

Nancy M. Nistler Date []

Manager, Minneapolis Airports District Office, MSP-ADO-600



U.S. Department
of Transportation

Federal Aviation
Administration

Memorandum

Subject: Runway Safety Area (RSA) Determination, Runways 1L/19R
& 13/31, General Mitchell International Airport, Milwaukee WI.

Date: 9/14/00

From: Manager, Minneapolis Airports District Office
MSP-ADO-600

Reply to DePottey
Attn. of: 612.713.4363

To: RSA Determination File

REFERENCE DOCUMENTS

Advisory Circular 150/5300-13, current edition.
Airport Layout Plan, dated July 1995
Aerial Photo, dated September 2, 1999
US Terminal Procedures, dated August 10, 2000
Runway Safety Area Data Sheet, dated August 29, 2000

BACKGROUND INFORMATION

The RSA survey was conducted on August 17, 2000 by the Certification/Safety Inspector.

Runway 1L/19R

This runway is a category D group V runway. The dimensions of Runway 1L/19R are 9690' long by 200' wide. Runway 1L has a category III precision instrument approach including high intensity approach lighting system with sequenced flashers (ALSF-2) providing straight-in minimums of 200-3/8. Runway 19R has a category I precision instrument approach including medium intensity approach lighting system with runway alignment indicator lights (MALSR) providing straight-in minimums of 200-1/2.

NavAids located within the RSA include:

Runway 1L: PAPI on the right side and approach lights.

Runway 19R: PAPI on left side, MALSR.

In addition to the NAVAIDS the following are also indicated as being in the RSA:

- College ave and natural terrain for Runway 1L.
- Perimeter road, fencing and Layton ave for Runway 19R.
- Access/maintenance road shown on the aerial photo connecting to College Ave.

In accordance with AC 150/5300-13, Table 3-3, the standard runway safety area for this runway has a required width of 500' and a length of 1000' beyond each end of the runway.

Relocation of the above noted access/maintenance roads should be considered. Airports Division issued Guidance Memorandum 97-1 on April 11, 1997, stating that access/maintenance roads should not be connected directly to a runway or taxiway unless there is no feasible alternative.

The Runway Safety Area Data Sheet indicates that all NAVAIDs meet frangibility requirements, except for some of the Runway 19R MALSR stations. Except as noted above, the FAR Part 139 inventory confirms that the remainder of the Runway 1L/19R RSA meets current standards, except for the frangibility of navaids.

Runway 13/31

This runway is a category D group V runway. The dimensions of Runway 13/31 are 5868' long by 150' wide. Runway 13/31 has visual approaches to both ends.

Nav aids located within the RSA include:

Runway 13: VASI on the left side and REILs.

Runway 31: VASI on right side, 7R localizer and REILs.

In addition to the NAVAIDs the following are also indicated as being in the Runway 13/31 RSA:

- Railroad tracks, perimeter/access road, fences, transformer and a drainage ditch.
- Access/maintenance roads from both runway ends connecting to perimeter road.

In accordance with AC 150/5300-13, Table 3-3, the standard runway safety area for this runway has a required width of 500' and a length of 1000' beyond each end of the runway.

Relocation of the above noted access/maintenance roads should be considered. Airports Division issued Guidance Memorandum 97-1 on April 11, 1997, stating that access/maintenance roads should not be connected directly to a runway or taxiway unless there is no feasible alternative.

ALTERNATIVES AVAILABLE - N/A

DISCUSSION - N/A

DETERMINATION

Runway 1L/19R

Based solely on the review of the above referenced documents, it has been determined that, at this time, the Runway 1L/19R safety area does not meet the current standards contained in AC 150/5300-13, but it is practicable to improve the RSA so that it will meet current standards, except for the frangibility of navaids. Milwaukee County is planning to build a bridge over College Ave to provide the RSA on the 1L end. This project is shown in the Airport Capital Improvement Plan for design starting in 2001. Shifting the runway to provide the additional RSA on the 19R end must be considered at the time of design. The frangibility of the navaids identified above, may not conform to the airport design standards for RSA's contained in AC 150/5300-13.

Runway 13/31

Based solely on the review of the above referenced documents, it has been determined that, at this time, the Runway 13/31 safety area does not meet the current standards contained in AC 150/5300-13, but it is practicable to improve the RSA so that it will meet current standards, except for the frangibility of nav aids. The ultimate plan is to close this runway when the third parallel 7/25 runway is built in 2014. The runway has a railroad at one end and Layton Ave at the other, it is not likely that these would ever be relocated. The only practicable way to improve the RSA for this runway is to shorten the runway length to provide the RSA. Consideration should be given to the use and need for this runway in the short term to determine the best use and runway length needed for the near term. The frangibility of the nav aids identified above, may not conform to the airport design standards for RSA's contained in AC 150/5300-13.

This determination is subject to FAA headquarters determining the practicability of changing the frangibility point for any nav aid identified above that does not meet the 3 inches above grade requirement for a nav aid located within the RSA.

This determination does not reflect a finding that the existing RSA grades and compaction conform to the appropriate grading and compaction requirements.

This determination is subject to appropriate airspace review, environmental finding for any work to correct RSA deficiencies.

This determination is preliminary and may be revised if additional information becomes available.

Sandra E. DePottay

Prepared by:

Sandra E. DePottay Date 9/14/00
Project Manager, MSP-ADO-680.4

Recommended by:


Robert A. Huber

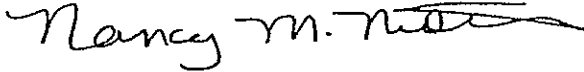
Robert A. Huber
Assistant Manager, Airports District Office, MSP-ADO-680

September 14, 2000

Date

This concurrence is based on our review of the Airway Facilities Division as-built drawings, for the above referenced nav aids, and the applicable national standard drawings. It appears all nav aids within the RSA are constructed with the frangible point at the lowest practical height that it is possible to achieve at this time with the exception of the Runway 19R MALSR.

Concurrence by:  September 20, 2000
Acting Assistant Manager, Date
Operations Branch, AGL-470A

Approved by:  9/20/00
Nancy M. Nistler Date
Manager, Airports District Office, MSP-ADO-600

Attachment: Runway Safety Area Data Sheet