

ALERT BULLETIN

AB 2024:21/11-1

9/4/2024

2138481, 2099658, 2099633

TO: Airport Manager, Reading Reg'l Airport/Carl A Spaatz Field (RDG), PA, FAA (AAS-1)

INFO: FAA (AAS-300, AJW-182, AVP-1, AVP-200, AJI-144, ATM RDG Tower, AJV-A, AEA-600, AFS-260, AFS-200, Director of Air Traffic Operations ESA North, Runway Safety Team), A4A, AAEE, ALPA, AOPA, APA, ASAP, CAPA, ATSAP, ATSG, IATA, IBT, ICAO, ICASS, IFALPA, IPA, NATCA, NBAA, NTSB, RAA, SWAPA

FROM: Becky L. Hooey, Director
NASA Aviation Safety Reporting System

SUBJ: RDG Airport Runway 31 RNAV Approach Terrain Warning Issues

We recently received ASRS reports describing a safety concern that may involve your area of operational responsibility. We do not have sufficient details to assess either the factual accuracy or possible gravity of the report. It is our policy to relay the reported information to the appropriate authority for evaluation and any necessary follow-up. We feel you should be aware of the following:

ASRS received a report from an air taxi Captain describing an apparent issue with the RNAV Runway 31 approach at RDG airport. Reporter stated they flew the approach accurately as charted, but received a low altitude alert from RDG Tower, as well as a GPWS terrain warning. Reporter further stated a conversation with ATC indicated this apparently happens frequently and may be related to a calibration issue.

Reports 2099658 and 2099633 describe similar terrain warning issues during Runway 31 approach to RDG. These reports are also enclosed. Please note 2099658 was recently issued as an alert message.

To properly assess the usefulness of our alert message service, we would appreciate it if you would take the time to give us your feedback on the value of the information that we have provided. Please contact Dr. Becky Hooey at (408) 541-2854 or email at becky.l.hooey@nasa.gov.



Aviation Safety Reporting System
P.O. Box 189 | Moffett Field, CA | 94035-0189



ACN 2138481**DATE / TIME**

Date of Occurrence	202407
Local Time Of Day	1201 to 1800

PLACE

Locale	RDG.Airport
State	PA

ENVIRONMENT

Flight Conditions	VMC
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AIRCRAFT / EQUIPMENT X

ATC / Advisory - Tower	RDG
Make Model Name	Medium Transport, Low Wing, 2 Turbojet Eng
Operating Under FAR Part	91

PERSON 1

Function - Flight Crew	Captain
Function - Flight Crew	Pilot Not Flying
ASRS Report Number	2138481

PERSON 2

Function - Flight Crew	First Officer
Function - Flight Crew	Pilot Flying
ASRS Report Number	2138340

EVENTS

Anomaly	Deviation / Discrepancy - Procedural - Published Material / Policy
Anomaly	Ground Event / Encounter - Ground Equipment Issue
Anomaly	Inflight Event / Encounter - CFTT / CFIT
Detector - Automation	Aircraft Terrain Warning
Detector - Automation	Air Traffic Control
Detector - Person	Flight Crew
Result - Flight Crew	FLC Override Automation

NARRATIVE 1

Vectored to RNAV 31 with a +50 ft derived MDA (1670) flown with A/P (autopilot) and A/T (autothrottles) on. Aircraft was well on path and all check lists were completed before FAF. Inside the final approach fix, we received a terrain alert from the Tower and at the same time a warning from the GPWS. Being VMC with a clear view of the surrounding, I instructed the First Officer to disconnect the A/P and continue that approach. The landing was uneventful. I asked ATC about this warning and they explained that it happens all the time on this approach and it could be because of a calibration issue. It is important to note that all mandatory crossing altitudes were respected.

Cause: Calibration issue on this particular approach.

Suggestions: Add a note from Operations on each flight package for this airport about this potential approach.

NARRATIVE 2

Received vectors for the RNAV 31. Approach has a higher MDA to account for terrain on the approach and we added an additional 50 ft to the MDA.. Autopilot was engaged and aircraft was on flight path and meeting the altitudes listed on the approach. Inside the final approach fix we received a terrain advisory and ATC instructed us to check altitude. Autopilot was disconnected and we continued the approach VMC. When we inquired with ATC about the warnings since we were on the approach they informed us that it happens all the time on that approach and it may be a calibration issue.

Cause: Calibration issues with the approach

Suggestions: Making sure situational awareness is maintained at all times. A procedure note for crews to inform them that this occurrence is a regular issue on this approach

SYNOPSIS

Flight crew reported receiving a terrain alert from ATC and a GPWS warning while on approach inside the final approach fix for the RNAV 31 approach to RDG airport. The crew noted they were in compliance with the approach minimums, disconnected the autopilot and continued the approach for a safe landing.

ACN 2099658**DATE / TIME**

Date of Occurrence	202403
Local Time Of Day	1201 to 1800

PLACE

Locale	RDG.Airport
State	PA
Altitude - MSL	1800

ENVIRONMENT

Flight Conditions	Mixed
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AIRCRAFT / EQUIPMENT X

ATC / Advisory - Tower	RDG
Make Model Name	Any Unknown or Unlisted Aircraft Manufacturer

PERSON 1

Function - Flight Crew	Pilot Flying
ASRS Report Number	2099658

PERSON 2

Function - Flight Crew	Pilot Not Flying
ASRS Report Number	2099649

EVENTS

Anomaly	Inflight Event / Encounter - CFTT / CFIT
Detector - Automation	Aircraft Terrain Warning
Detector - Person	Flight Crew
Result - Flight Crew	Executed Go Around / Missed Approach
Result - Flight Crew	FLC Complied w / Automation / Advisory

NARRATIVE 1

I was the pilot flying the RNAV (GPS) 31 to RDG. The autopilot was on and providing inputs to the flight controls. We received an Obstacle Alert Caution and then immediately thereafter an Obstacle Warning for the Tower depicted at ADEKY on the approach. We had no deviation, laterally, horizontally, or velocity for the approach. We executed the escape maneuver. This Tower is in the flight path of the approach. The approach is not safe and is unflyable without receiving an Obstacle Caution and Warning.

Immediately cease using this approach. It is unsafe and results in an Obstacle Caution and Warning. The approach in its current configuration is not safe and needs to be decommissioned. This runway needs an offset or RNP approach that would be similar to the approach into DCA Runway 19.

NARRATIVE 2

RNAV 31 into RDG. Pilot flying is Person A, autopilot and LNAV/VNAV engaged. Fully configured and stabilized 1.5 miles from FAF, knowing about obstacles on short final. Still received GPWS warning over ADEKY. Executed escape maneuver. This approach is impossible to be stable without receiving GPWS warning due to towers on short final.

SYNOPSIS

Flight crew reported receiving a terrain warning on the RDG RNAV (GPS) Runway 31 approach for nearby towers even though they flew the approach accurately.

ACN 2099633

DATE / TIME

Date of Occurrence	202403
Local Time Of Day	0601 to 1200

PLACE

Locale	RDG.Airport
State	PA
Altitude - MSL	1800

AIRCRAFT / EQUIPMENT X

ATC / Advisory - Tower	RDG
Make Model Name	Commercial Fixed Wing
Operating Under FAR Part	121

PERSON 1

Function - Flight Crew	Captain
Function - Flight Crew	Pilot Flying
ASRS Report Number	2099633

PERSON 2

Function - Flight Crew	First Officer
Function - Flight Crew	Pilot Not Flying
ASRS Report Number	2099621

EVENTS

Anomaly	Inflight Event / Encounter - CFTT / CFIT
Detector - Automation	Aircraft Terrain Warning
Detector - Person	Flight Crew
Result - Flight Crew	Took Evasive Action

NARRATIVE 1

I was the pilot flying the RNAV (GPS) 31 to RDG. The autopilot was on and providing inputs to the flight controls. We received an Obstacle Alert Caution and then immediately thereafter an Obstacle Warning for the Tower depicted at ADEKY on the approach. We had no deviation, laterally, horizontally, or velocity for the approach. We executed the escape maneuver in accordance with the AOM. This Tower is in the flight path of the approach. The approach is not safe and is unflyable without receiving an Obstacle Caution and Warning. Yes, this write-up is exactly like the one I submitted for the event on [another day]. The first event was not a fluke. I am convinced if you fly this approach as it is published this will be the result each and every time.

Cease utilizing this approach to Runway 31. It is unsafe and use of it will result in an Obstacle Caution and Warning. This approach in its current configuration and parameters will result in an Obstacle Warning, the approach needs to be a RNP approach similar to the one in DCA to Runway 19 or it needs to be an offset approach like the one to 16R in DEN.

NARRATIVE 2

RNAV 31 into RDG. Pilot flying is Captain, autopilot and LNAV/VNAV engaged. Fully configured and stable 1.5 NM from FAF, knowing about obstacles on short final. Still received GPWS warning over ADEKY. Executed

escape maneuver. This approach is impossible to be stable without receiving GPWS Warning due to towers over ADEKY.

SYNOPSIS

Air carrier flight crew reported receiving a terrain warning while above a waypoint on the approach due to the close proximity of towers.