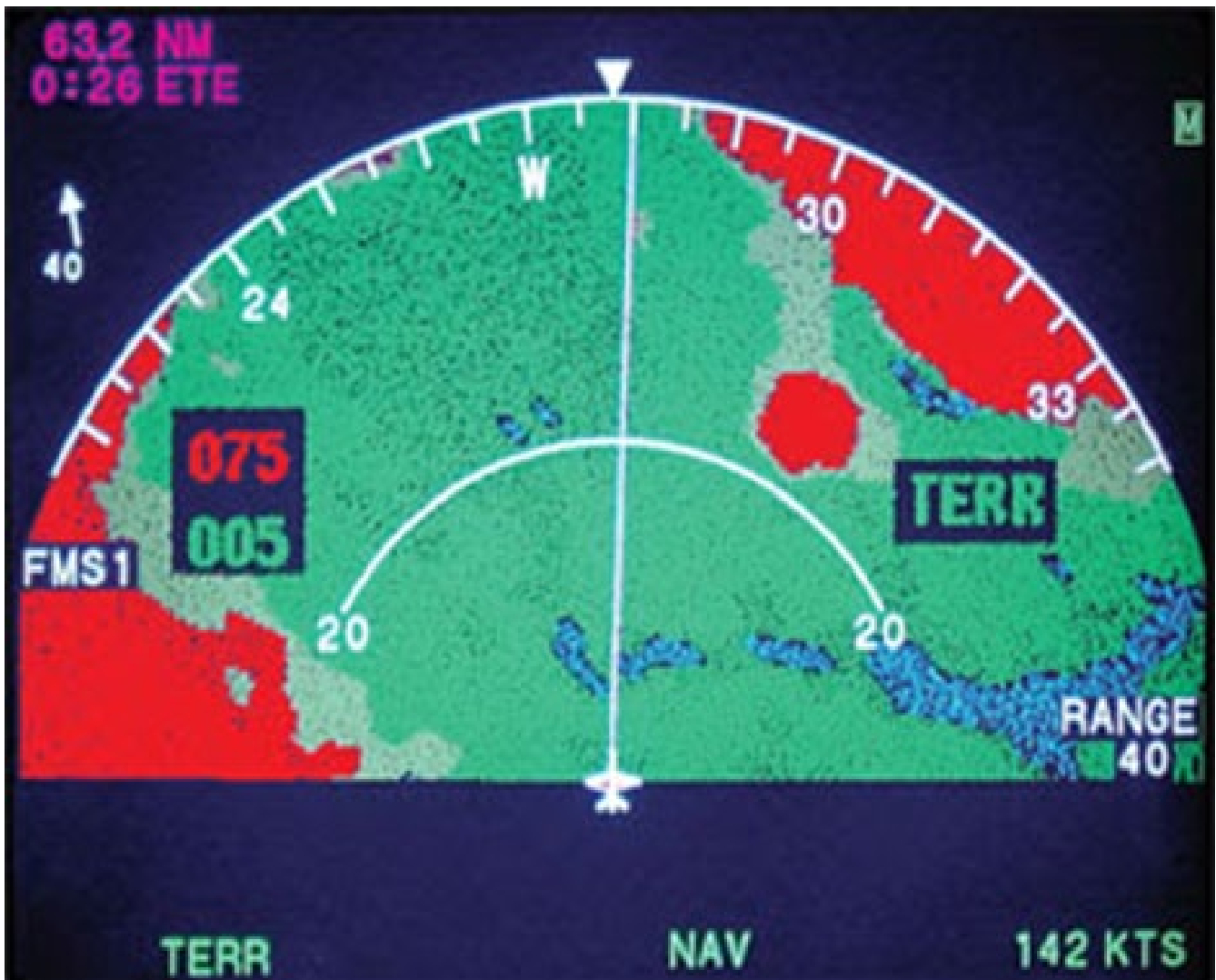




Enhance Access to EGPWS / TAWS Database Information

EGPWS / TAWS Suppliers





Problem Statement

IATA conducted a [Safety Risk Assessment](#) and identified concerns about the use of the Enhanced Ground Proximity Warning System / Terrain Avoidance and Warning System (EGPWS/TAWS) that must be addressed to ensure that timely warnings to accident avoidance are always available. One of the EGPWS/TAWS safety issues that has been identified is the concern over the upkeep of software on which EGPWS/TAWS depends, as well as the obstacle, runway, and terrain database (TDB). Although the database updates are issued regularly by the EGPWS/TAWS suppliers, the concern is that these updates are not being implemented by all Holders of Air Operator Certificate (AOC) in a timely manner.

IATA together with certain EGPWS/TAWS Suppliers, teamed up to provide information about:

- 1) How and where to find the latest EGPWS/TAWS Terrain Data Base (TDB)
- 2) TDB release schedules
- 3) How to view what has changed in the TDB
- 4) The link to download the TDB

Action by IATA

IATA's position is that this concern, and its related safety issues, requires immediate attention and to address these serious shortcomings. IATA met with EGPWS/TAWS manufacturers and suppliers: Collins, Honeywell, L3Harris, Thales, and ACSS to facilitate the application of database/software updates and their frequency. It revealed that each of the suppliers has a schedule and a certain method for communicating the terrain database updates with their customers, e.g.:

From the TDB, some updates are provided on a 28-day cycle and are available for download approximately a week prior to the effective date, while others require a 56-day cycle and are available for download approximately a month before the effective date.

Each supplier communicates the update differently with their customers, but they all have common procedures.

Each supplier also offers an obstacle DB, applicable to some EGPWS/TAWS models.



Information for Operators

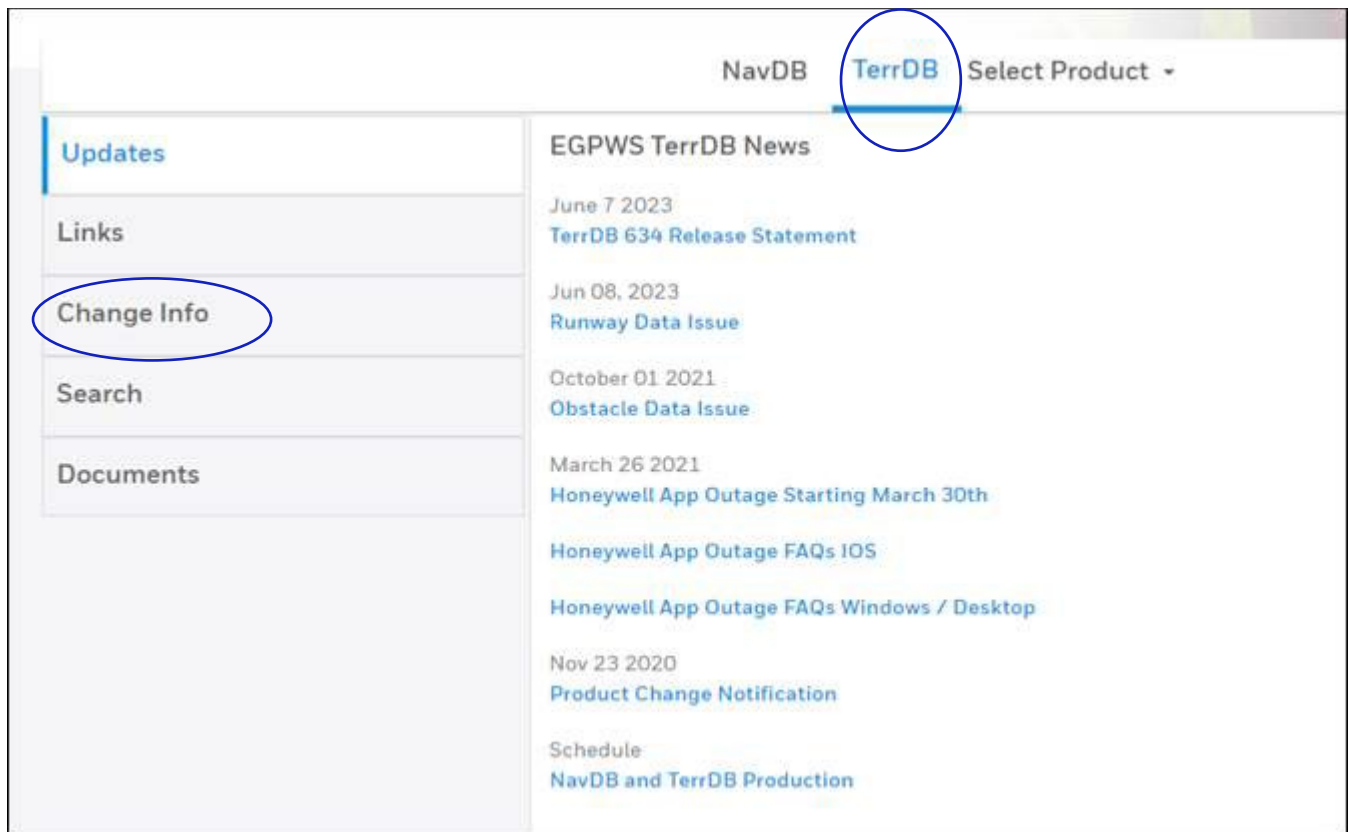
Honeywell and Collins

These suppliers provide the Obstacle and TDB update every 56-day cycle and are available for download approximately a month before the effective date. The EGPWS operators are able to sign up for an email notification that a new database download is available. The database is available through the internet and takes up to 30 minutes to complete once downloaded onto a card that interfaces with the EGPWS system.

Collins provides the Integrated Surveillance System (ISS) on certain aircraft and the TAWS component of the ISS is sourced by Collins from Honeywell. Database updates for the TAWS are available from Honeywell.

The link to Honeywell website is <https://ads.honeywell.com/login>

Once users are at the website they can select 'TerrDB' to see the latest News.



There are tabs and links on the left pane which provide additional information. Under Documents for example, users can find the latest Database Release Statement, which has been published on 5 October 2023.

One of the tab on the left menu is a "Change Info" Tab, once selected a list of terrain database versions are available for download. Select the appropriate version changes that you wish to change. Then an excel spreadsheet containing the change information will be downloaded that can either be opened or saved on your computer from your download folders. After opening the various change information. The User can then review the customer report issues that have been addressed, the added/removed airports, the added/removed runways, modified runways and much more can be viewed by selecting the appropriate tab at the bottom of the spreadsheet.



Furthermore, there are quite a few videos on the Honeywell YouTube channel which provide information on the EGPWS Database website, once on the channel users can search 'EGPWS Terrain Database' to find specific videos. <https://www.youtube.com/@HoneywellAviation/videos>.

L3Harris and Aviation Communication & Surveillance Systems, LLC (ACSS) :

These suppliers provide the Obstacle and TDB updates on a 28-day cycle and are available for download approximately a week prior to the effective date. The TAWS operators who have signed up for a website account automatically receive an email notification that a new database download is available. The database is available through the internet and takes up to 30 minutes to complete once downloaded onto a card that interfaces with the TAWS system.

ACSS is an L3Harris and Thales Company, managed by L3Harris Technologies, Inc. ACSS, an L3Harris Technologies and Thales Avionics joint venture, designs, manufacturers and provides support for surveillance and communication products used in aircraft, helicopters and UAVs.

In order to obtain the latest update, Users must login to the publication and index site. However, you may not have access to all the files listed in the index. At the time of sign-up or any time thereafter, you may request access to additional product publications that you need, such as the T3CAS or T2CAS Terrain and/or Obstacle databases.

The screenshot shows the L3Harris Publications & Software Index website. The header includes the L3Harris logo, navigation links for 'HOME' and 'PUBLICATIONS & SOFTWARE INDEX', and the ACSS logo. A banner reads 'PUBLICATIONS & SOFTWARE FOR L3HARRIS AVIONICS' with a background image of an airplane. Below the banner are 'SIGN UP' and 'LOGIN' buttons. A 'Contact Us' link is visible in the top right. An 'ANNOUNCEMENTS' section at the bottom features a news item about a new Obstacle Database Release 063 for TAWS+, T2CAS and T3CAS products, dated 5/23/2023.

Publications & Software Index
Listing of all publications & software on this site – including latest revision number & date. (No login required to view index. You must login to download the publications & software)

Sign Up
Register for a new account (account required to download publications & software)

Login
You must login to your account to download any publications & software you have access to.

Contact Us
Information on how to get support. You can also send us a question through the online inquiry form.

Announcements
Latest news/updates from our team

The link to the L3Harris publications website is [Landing Page - Technical Publications \(l3harris.com\)](https://www.l3harris.com/technical-publications) and the link to the L3Harris Commercial Avionics Technical Publications Website User Manual can be found [here](#). This presentation will help users to be aware of the access requirements and how to navigate and get up to date information.

Check the [Publication & Software Index](#) which includes the latest revision number and date.

Publication & Software Index



Index
Full catalog of all files on the site, one for each division. These listings are updated daily. You do not need to login to view these.

What's in the Index?
Index lists the following info for each file on the site:

- Product
- File Type
- Publication Part Number
- ATA Number
- Revision
- Revision Date
- Title
- Subject / Description
- Product Part Numbers

Search Index
To search within the index:

1. Open the index
2. Press Ctrl+F on keyboard, or go to the browser menu and press "Find"

Please Note:

- You must login to view/download the file.
- You may not have access to all the files listed in the index. Once logged in, you may request access to additional files that you need.

Once the user is logged in, select the ACSS Database & Airports Runway Search, to find the terrain, obstacle, and waypoint databases for download together with its supporting information. To aid in finding the changed airports, each Terrain DB release is accompanied by a Technical Newsletter (TNL) with a listing of changed or added/removed airports modified or added/removed runways and much more.

Use the TNL as a guide on what effect may occur if no update is made in a given period. For the latest downloads, see ACSS Database & Airport Runway Search.

ACSS Databases & Airport Runway Search (1/3)

Don't see this page?
If you don't see this option in the top navigation bar and need it, please contact us.

Latest Downloads
Use these buttons to see all files related to these databases, such as:

- database itself
- technical newsletter
- airport list

See the latest downloads as well as previous versions.
(If you don't see the database you need, you will need to Request Access)

Airport Runway Search
Displays the airport and runway availability for the latest terrain database versions (see next slide for more information)

ACSS DATABASES
Find Terrain, Obstacle and Waypoint Databases for download and supporting information.
Please note: You will only see what your Technical Publications account has been given access to.

LATEST DOWNLOADS

Waypoint Databases	T3CAS Terrain Database (615A Version)
T3CAS Terrain Database	T2CAS TAWS Plus Terrain Database
Obstacle Database (CF Version)	Obstacle Database (615A Version)

Approximate Release Schedule
(Terrain DB only)
T2CAS / TAWS+ / T3CAS

- See below for the targeted Terr DB schedule for T3CAS and T2CAS/TAWS+ respectively. As before, ACSS can not confirm a specific release date as the release process is not always going through steps A to Z with no problems. Sometimes, we have to start the process over if we catch a problem.

18-Jan-2023: v140/v180	7-Jun-2023: v145/v185	25-Oct-2023:
15-Feb-2023: v141/v181	30-Jun-2023: v146/v186	17-Nov-2023:
15-Mar-2023: v142/v182	2-Aug-2023: v147/v187	
13-Apr-2023: v143/v183	30-Aug-2023: v148/v188	
10-May-2023: v144/v184	27-Sep-2023: v149/v189	

AIRPORT RUNWAY SEARCH
Displays the Airport and Runway availability for the latest terrain database versions.

Product: T2CAS/TAWS+ T3CAS

Version:

Airport:

SEARCH

ACSS Databases & Airport Runway Search (2/3)



AIRPORT RUNWAY SEARCH
Displays the Airport and Runway availability for the latest terrain database versions.

(1) Choose Product using the terrain database

Product: T2CAS/TAWS+ T3CAS

(2) Choose Version of that database product

Version:

(3) Enter Airport ICAO, IATA or Airport Name

Airport:

(4) Press SEARCH

ICAO, IATA, or Airport Name

Airport Name	ICAO	IATA	Area Code	Airport Area	TAWS Validity	Runway	ROPS Validity
MACK MESA	10CO		USA	SAA	valid	RW07	Invalid
MACK MESA	10CO		USA	SAA	valid	RW25	Invalid
PHOENIX-MESA GATEWAY	KIWA	AZA	USA	SAA	valid	RW12L	Valid

* The definition of a basic airport's inhibition area is "a cylinder with a radius of 2Nm and height of 900 feet above the airport which is used to inhibit terrain". All GPWS modes including Modes 1 and 2 are fully activated in this case to provide protection when on approach to and departure from a basic airport. Predictive alert modes are not available at this point when the aircraft is operating in this cylinder. No DB landing tunnels are constructed on this airport's runways.

TAWS Validity

- Valid** indicates runway information is present and therefore predictive alert modes are inhibited via a landing tunnel constructed on approach to these runways.
- Invalid** indicates a basic airport*, meaning a basic cylinder is being used for terrain alerting inhibition.

ROPS Validity

Indicates whether Runway Overrun Protection System (ROPS) alerting is possible at this airport.

- Valid** indicates runway thresholds are encoded for the additional ROPS alerting available on some T3CAS units that are certified for this feature.
- Invalid** indicates runway thresholds are not yet encoded for this.

ACSS Databases & Airport Runway Search (3/3)



Comparing Database Versions
With a new database released every 28 days, customers often find it useful to compare one database to a previous one.

VERSION 145

AIRPORT RUNWAY SEARCH
Displays the Airport and Runway availability for the latest terrain database versions.

Product: T2CAS/TAWS+ T3CAS

Version:

Airport:

ICAO, IATA, or Airport Name

Airport Name	ICAO	IATA	Area Code	Airport Area	TAWS Validity	Runway	ROPS Validity
INDIRA GANDHI, DELHI	VIDP	DEL	MES	SAA	valid		
INDIRA GANDHI, DELHI	VIDP	DEL	MES	SAA	valid	RW09	Valid
INDIRA GANDHI, DELHI	VIDP	DEL	MES	SAA	valid	RW10	Valid
INDIRA GANDHI, DELHI	VIDP	DEL	MES	SAA	valid	RW11R	Valid
INDIRA GANDHI, DELHI	VIDP	DEL	MES	SAA	valid	RW27	Valid
INDIRA GANDHI, DELHI	VIDP	DEL	MES	SAA	valid	RW28	Valid
INDIRA GANDHI, DELHI	VIDP	DEL	MES	SAA	valid	RW29L	Valid

Version 145
In this example, we see that the earlier version 145 of the database does not yet contain runways 11L or 29R.

VERSION 146

AIRPORT RUNWAY SEARCH
Displays the Airport and Runway availability for the latest terrain database versions.

Product: T2CAS/TAWS+ T3CAS

Version:

Airport:

ICAO, IATA, or Airport Name

Airport Name	ICAO	IATA	Area Code	Airport Area	TAWS Validity	Runway	ROPS Validity
INDIRA GANDHI, DELHI	VIDP	DEL	MES	SAA	valid		
INDIRA GANDHI, DELHI	VIDP	DEL	MES	SAA	valid	RW09	Valid
INDIRA GANDHI, DELHI	VIDP	DEL	MES	SAA	valid	RW10	Valid
INDIRA GANDHI, DELHI	VIDP	DEL	MES	SAA	valid	RW11L	Invalid
INDIRA GANDHI, DELHI	VIDP	DEL	MES	SAA	valid	RW11R	Valid
INDIRA GANDHI, DELHI	VIDP	DEL	MES	SAA	valid	RW27	Valid
INDIRA GANDHI, DELHI	VIDP	DEL	MES	SAA	valid	RW28	Valid
INDIRA GANDHI, DELHI	VIDP	DEL	MES	SAA	valid	RW29L	Valid
INDIRA GANDHI, DELHI	VIDP	DEL	MES	SAA	valid	RW29R	Invalid

Version 146
By entering the current database version (146 in this case), the user could discover that the new runways 11L & 29R



Summary Table

SUPPLIER	UPDATE CYCLE *	READY FOR DOWNLOAD	USER GUIDANCE	WHERE TO FIND THE INFO
Honeywell	56 Day Cycle	A month prior	EGPWS Database website	https://ads.honeywell.com/login
Collins	56 Day Cycle	A month prior	EGPWS Database website	https://ads.honeywell.com/login Aeronautical Data Services - Home
L3Harris ACSS and Thales	28 Day Cycle	A week Prior	Commercial Avionics Technical Publications Website User Manual	Landing Page - Technical Publications (l3harris.com)

* Note: IATA is working with EGPWS/TAWS manufacturers to align the TDB delivery schedule of all aircraft types to a maximum of 56 days.

Contact

Should you require further information, please do not hesitate to contact the supplier directly at the following email address:

For

Honeywell: TerrDB@Honeywell.com

Collins: avionicssupport@collins.com

L3Harris, ACSS and Thales: acss.techsupport@l3harris.com

IATA; Safety@iata.org

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