



SUPPORTING
EUROPEAN
AVIATION



LADR and Ops Control

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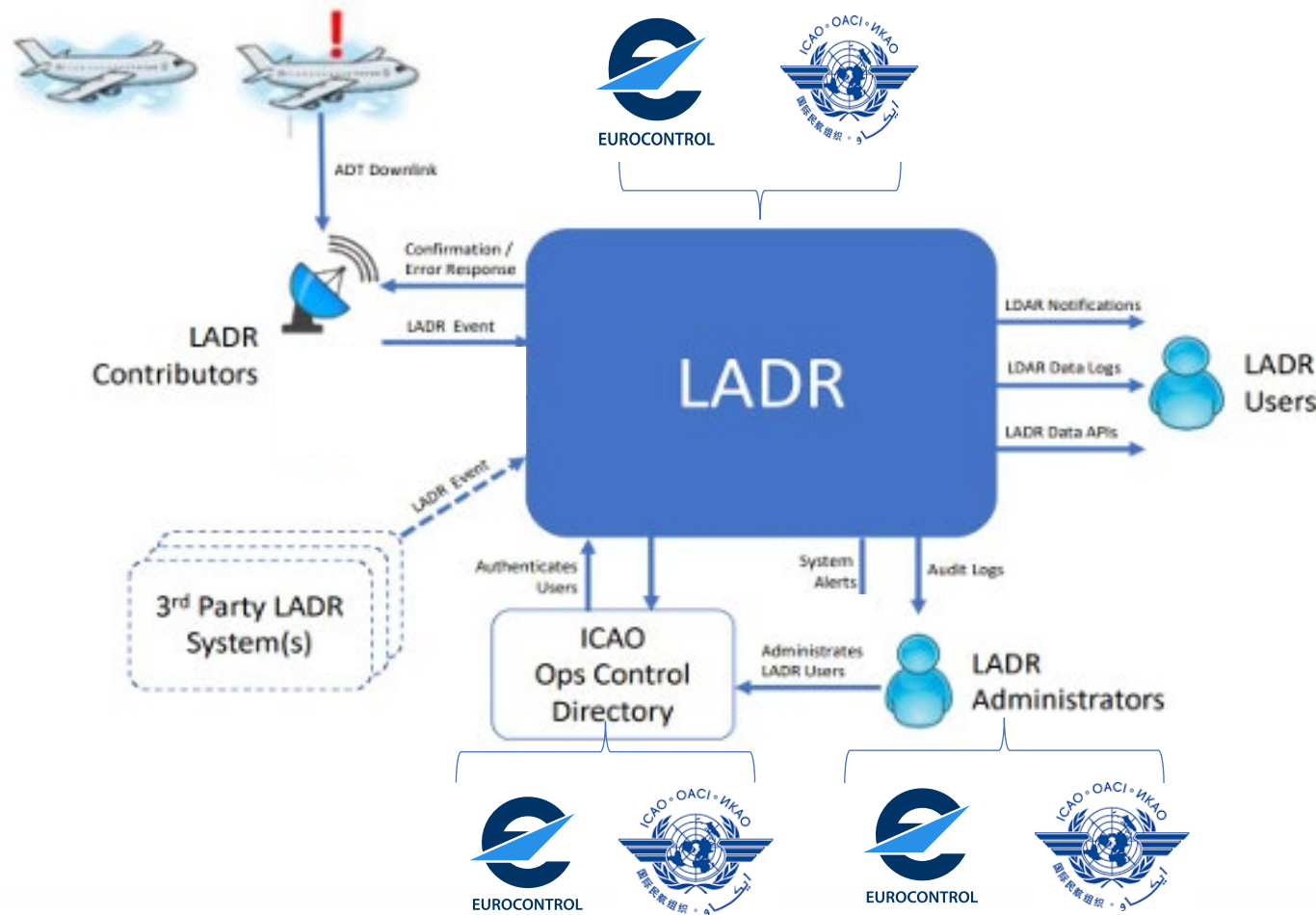


Content

- LADR& Ops Control: Background and Current State
- Plans for Future Enhancement
- Conclusions



LADR: Background



LADR Users

- Air operators
- ANSPs
- RCCs

LADR and Ops Control Current State



LADR Ops Release 3.0.0



LADR Pre-Ops Release 4.0.0 – presentation focused on v. 4.0.0



LADR Manual v.1.1. (for Ops) and v.1.2. (for Pre-Ops)



LADR 24/7 Monitoring

LADR and Ops Control Functional Blocks



Ops Control

- Super User Dashboard
- Organisation Management
- User Management
- Operational Contact Details
- Data Transfer



LADR

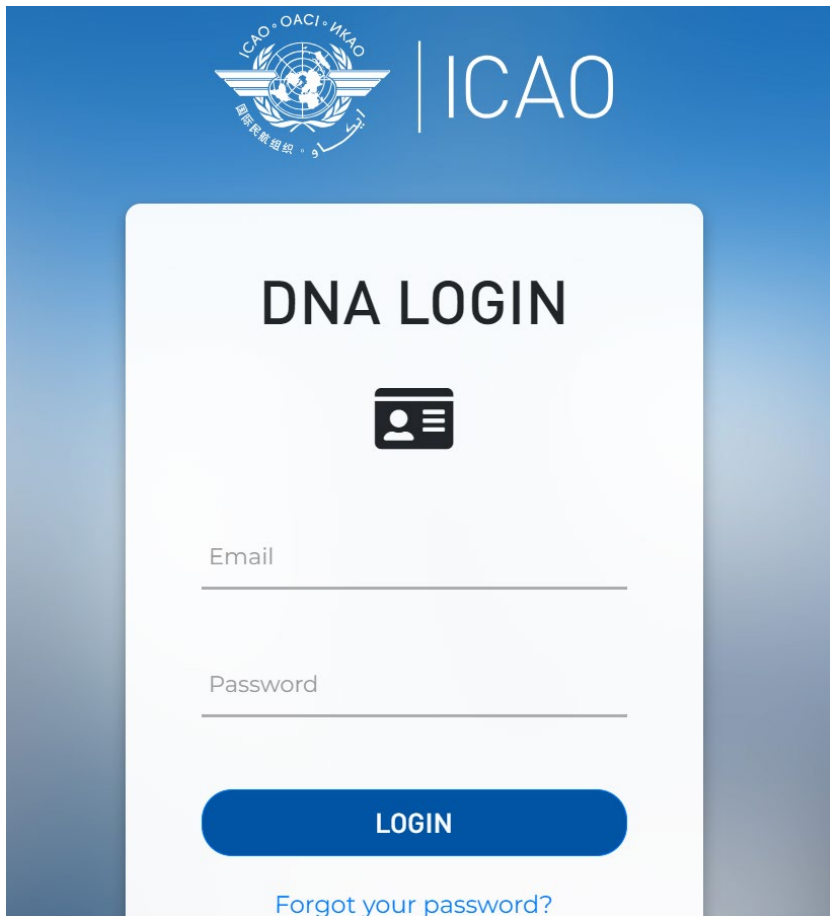
- Event Map
- Receipt, Validation, and Publication of Contributor Data
- Contributor Test Messages
- Map Layers (FIR, Satellite, States Map)
- Display of All Messages and Correlation to Events
- Notification (Email and Web- notifications)
- 24/7 Monitoring
- List of Distress Events
- Last Known Position Details
- History Page
- Events Search Function



Other Functional Blocks


- Connection to ICAO DNA (Authentication)
- Connection to ICAO 3LD System (AO Automatic Sync)
- Help Page
- LADR Manual
- Privacy

Prerequisites for Using LADR



ICAO - OACI - ИКАО
國際民航組織

DNA LOGIN



Email

Password

LOGIN

[Forgot your password?](#)

- ICAO DNA Account:
 - All users **MUST** have an ICAO DNA account
 - Enter credentials on the ICAO DNA login page
 - After validation, the LADR application will load automatically



Ops Control

- ICAO administrates Ops Control – Organisations and Users
- Main principles:
 - One focal point per organisation;
 - Focal point authorises users for the Organisation - **Key to enabling users to view distress events**
 - Focal Point sets up the organisation/sub-organisation
 - Focal Point sets notifications as per LADR FIR Location Indicators
 - Focal Point adds operational contact details – **Key to enabling LADR Notifications**
 - Focal Point turns ON the function to receive LADR Notifications - **Key to enabling LADR Notifications**
 - ICAO Contact Details: aircrafttracking@icao.int

Example of Ops Control- Organisation Management

Organisation Management

Organisations Home > Organisation

[< Back](#)

SRR TEST-FMMM-RCC

Identification

Name	TEST-FMMM-RCC
Location Indicator	FMMM
LADR FIR Location Indicators	FMMM
Country Code	DZA

- Focal Point sets up the organisation/sub-organisation
- Focal Point sets notifications as per LADR FIR Location Indicators

Example of Ops Control - Notifications Set Up

RCC TEST-FMMM-RCC-SUB

Identification

Name	TEST-FMMM-RCC-SUB
Part of Organization	FMMM TEST-FMMM-RCC
Oceanic Flag	Yes

[Update identification info](#)

Contacts

[Create new contact](#)

Duty Manager

[Update contact](#) 

Contact Details

E-mail: Fabio.marchetto.ext@eurocontrol.int
Phone: 54654654

Contact availability

24/7

Validation Status

Validated since: 2024-09-30
[Set invalid](#)

Notification Status

On [turn off](#)

- Focal Point sets up the organisation/sub-organization
- Focal Point adds operational contact details
- Focal Point turns ON the function to receive LADR Notifications

Example of Ops Control –User Management

AO NDTECH Demo -NIL

Identification

Name	NDTECH Demo -NIL
3LD Designator Code	NIL
Country Code	UA

[Update identification info](#)

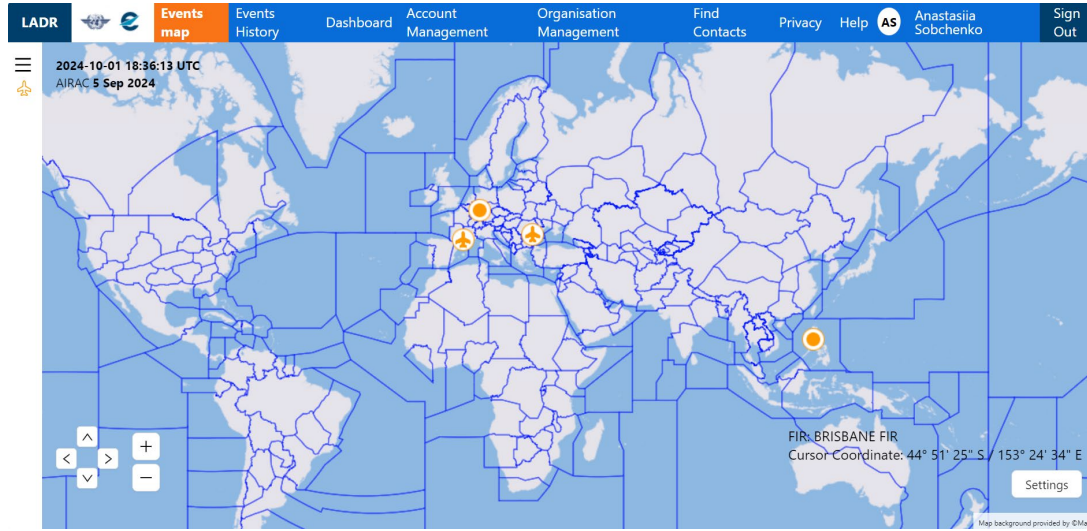
Sub-Organisations [Accounts](#)

search account to add [Connect account](#) [Authorize new account](#)

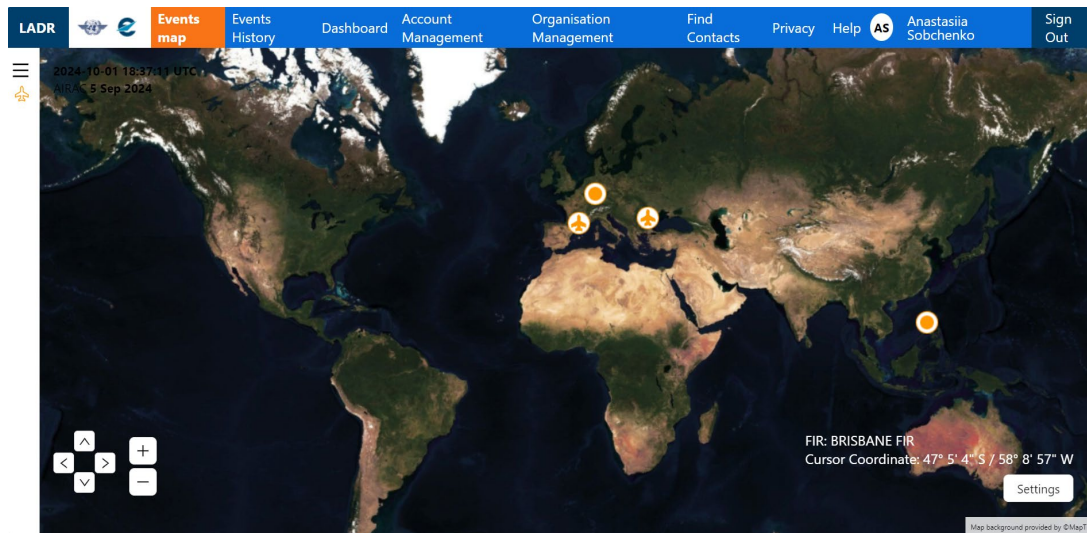
Account	Organisation(s)	Status	
Anastasiia Sobchenko	testBug001 NDTECH Demo -NIL EUROCONTROL	authorized	User <input type="text"/>

- Focal point authorises users for the Organisation

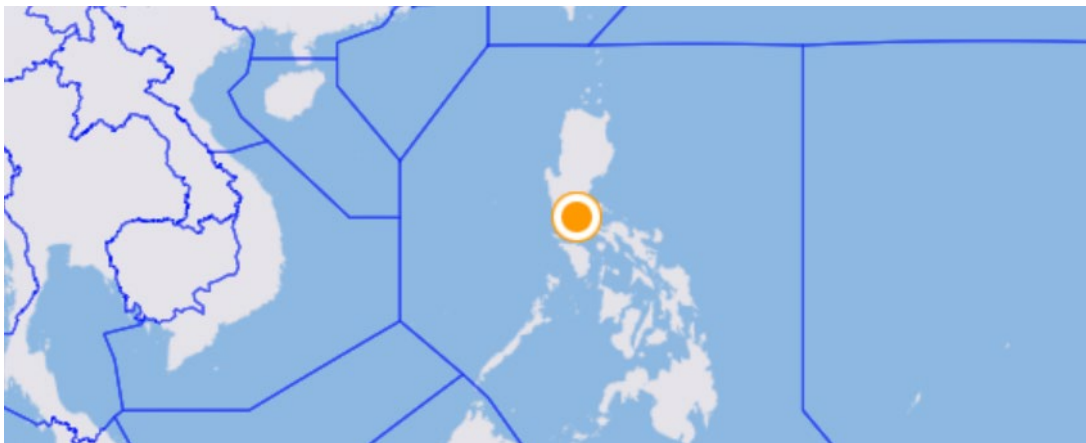
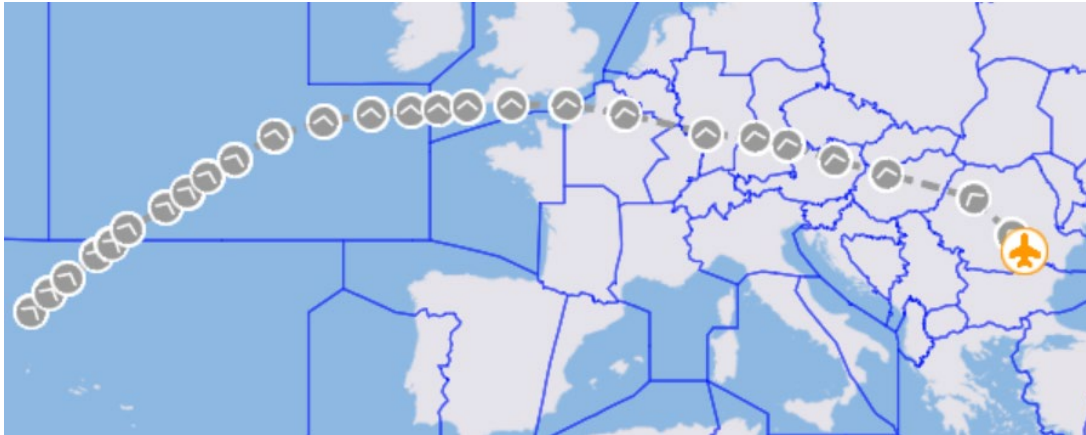
LADR Key Function: Map View



- LADR Map:
 - 3D and 2D
 - Various Map Layers
 - Various Map Projections
 - AIRAC Update




LADR Key Function: LKP



- LKP:
 - Shown on the Map
 - Icons:
 - Orange dot- LKP without heading
 - Aircraft – LKP with heading received
 - Grayed Out – previous positions received

LADR Key Function: List of Distress Events

The screenshot displays the LADR (List of Active Distress Events) interface. At the top, there are navigation tabs for 'LADR', 'Events map', and 'Events History'. Below the tabs, a hamburger menu icon is visible. The main content area is divided into two sections: 'Active distress events' and 'Recently finished (24h)'. The 'Active distress events' section shows a single event with the flight number 758771, operator CEB, and a 'New' status. The 'Recently finished (24h)' section shows a list of flight numbers, including 3B581D (BHYAD) and a list of airports: LPPO, EGGX, EISN, EGTT, LFRR, LFFF, EBBU, LFEE, EDMM, EDGG, LKAA, LOVV, LZBB, LHCC, and LRBB.

LADR  **Events map** **Events History**

☰

Active distress events 1

758771 New RPHI >
CEB
1st signal: 18:27

Recently finished (24h) 3 ▾

3B581D (BHYAD)
SABJ - QKF
1st signal: 12:22

LPPO
EGGX
EISN
EGTT
LFRR
LFFF
EBBU
LFEE
EDMM >
EDGG
LKAA
LOVV
LZBB
LHCC
LRBB

- List of
 - Active distress events
 - Recently finished events

LADR Key Function: Detailed Event Information

- Example of Details received from Contributors

> **Flight** ✕
031600

Basic info **All positions**

Last known position 📍
Accuracy of position data: 200m

Lat	14° 30' 60" N
Long	121° 1' 4" E
Sent	2024-10-01 18:44:14 UTC
Received	2024-10-01 18:44:54 UTC
Alt	-
Speed	-
Heading	-

Regions crossed

RPHI

> **Flight** ✕
031600

Basic info **All positions**

- > Last signal time: 2024-10-01 18:45:42 UTC
- > Last signal time: 2024-10-01 18:45:13 UTC
- > Last signal time: 2024-10-01 18:44:43 UTC
- > Last signal time: 2024-10-01 18:44:14 UTC
- > Last signal time: 2024-10-01 18:43:44 UTC
- > Last signal time: 2024-10-01 18:43:15 UTC
- > Last signal time: 2024-10-01 18:42:46 UTC

Aircraft Identification

3LD	CEB
Aircraft registration	-
Aircraft 24-bit address	758771
Selective calling system	-
Call sign & flight number	-

Data information

ELT	44923AC3B8BFDF
Contributor code(s)	-
ADT type	ELT_DT

Sent	2024-10-01 18:45:42 UTC
Received	2024-10-01 18:46:05 UTC
Lat	14° 30' 60" N
Long	121° 1' 4" E
Alt	-
Speed	-
Heading	-
Aircraft 24-bit address	758771
Aircraft registration	-
Selective calling system	-
Call sign & flight number	-

LADR Key Function: Notifications

- Email notification

Distress Event Notification

 LADR Notifications <ladr.notifications@ladr.eurocontrol.int>
To:  SOBCHENKO Anastasiia

Click here to download pictures. To help protect your privacy, Outlook prevented automatic download of some pictures in this message.

Dear Duty Manager,

There is a new distress event that needs your attention:

Aircraft Address: 3C3BFB

Aircraft Registration: BHYAD

Selective Calling Code: DRFL

3LD: MAQ

Latitude: 47.37264228258954

Longitude: -1.9298360875085052

LADR FIR Location Indicator: LFBB, LFRR, LFFF

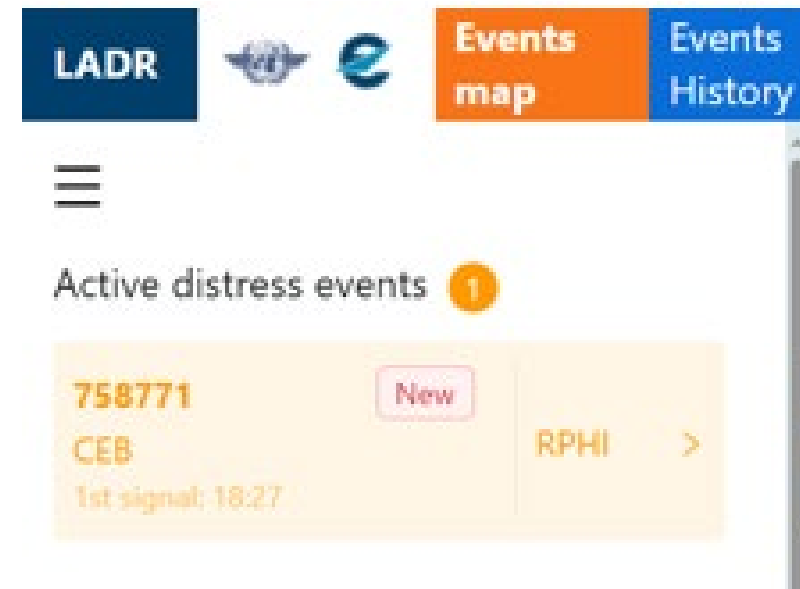
Time: 2024-10-01 09:41:33

Please click [here](#) to access the event in the LADR application.

Kind Regards,

LADR Team

- Web-notification



The screenshot shows the LADR web application interface. At the top, there is a navigation bar with the LADR logo, a globe icon, and the Eurocontrol logo. To the right of the navigation bar are two buttons: "Events map" (orange) and "Events History" (blue). Below the navigation bar is a hamburger menu icon. The main content area displays "Active distress events" with a notification badge showing the number "1". Below this, there is a card for an active event with the following details: "758771" (highlighted in orange), "CEB", and "1st signal: 18:27". To the right of the card, there is a "New" button and the text "RPHI" followed by a right-pointing arrow.

LADR Key Function: Event History

Distress Events History

Events history

Search inactive events 30 days back

3LD Operator: 3LD Operator
LADR Location Indicator: LADR Location Indicator
Date Range: 2024-09-30 → 2024-10-01
[Search events](#)

Extensive Search:

Aircraft Registration: Aircraft Registration
Aircraft 24-bit address: Aircraft 24-bit address
SELCAL: SELCAL

Identification	3LD operator	LADR Location Indicator	1st signal time	Last signal time	Last position	
758771	CEB	RPHI	2024-10-01 18:27:27 UTC	2024-10-01 18:50:28	14° 30' 60" N 121° 1' 4" E	See on map
3B581D (BHYAD)	QKF	LPPO, EGGX, EISN, EGTT, LFRR, LFFF, EBBU, LFEE, EDMM, EDGG, LKAA, LOVV, LZBB, LHCC, LRBB, UKLV, LBSR	2024-10-01 12:22:52 UTC	2024-10-01 12:22:54	44° 34' 12" N 26° 17' 16" E	See on map
3C38FB (BHYAD)	MAQ	EGTT, LFRR, LFBB, LFFF, LECB, LFMM	2024-10-01 09:41:31 UTC	2024-10-01 09:41:33	43° 15' 40" N 2° 51' 19" E	See on map

- List of:
 - Events (30 days)
 - Extensive search function
 - Link to the event map view

The screenshot shows the LADR web interface. The top navigation bar includes 'LADR', 'Events map', 'Events History', 'Dashboard', 'Account Management', 'Organisation Management', 'Find Contacts', 'Privacy', 'Help', and user information 'AS Anastasia Sobchenko' with a 'Sign Out' button. The main content area is divided into three sections: 'Active distress events' (1 event), 'Recently finished (24h)' (2 events), and a detailed map view. The map view shows a flight path over the Middle East region, with a cursor at 28° 46' 46" N / 32° 40' 24" E. The right sidebar displays flight details for flight 031100, including 'Last known position' (14° 30' 60" N, 121° 1' 4" E) and 'Regions crossed' (RPHI). The bottom of the page shows 'Aircraft Identification' and 'RPHI'.

Find Contacts

- Search of Operational Contact Details

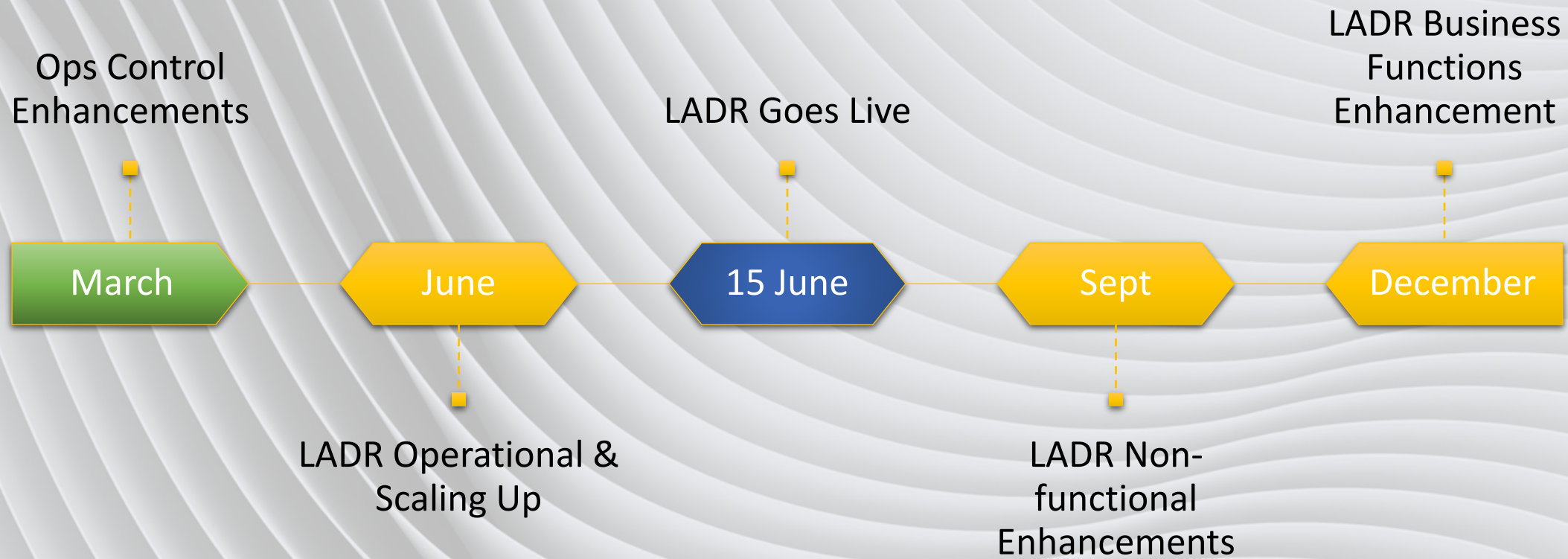
The screenshot displays the LADR (Local Area Data Reporting) interface for finding operational contact details. The top navigation bar includes links for LADR, Events map, Events History, Dashboard, Account Management, Organisation Management, Find Contacts (highlighted), Privacy, Help, and a user profile for Anastasiia Sobchenko. The main content area is titled 'Find OpsControl Contacts' and features a filter for 'Organisation Type' with options: All (selected), Operator, FIR, and SRR. Below the filter is a search input field containing 'test' and a search button. The search results are displayed in a table:

FIR-TEST-TEST 1	
ACC-New ACC 1	
test deletion	
Contact Details E-mail: test@icao.int Phone: 49063890873	Contact availability 24/7

LADR Enhancements in 2024

1. Contributors Heartbeat
2. Contributors Code and ADT Activation Method Display
3. Technical Tests with Contributors
4. User preferences
5. Enhancement of Non-functional Requirements
6. Users B2B Services Prototype

LADR Development 2024



Conclusions



LADR and Ops Control meet majority of the ICAO Doc 10150 specifications, and the upcoming release plans to enhance the remaining set of functions.



The timely setup of:

- DNA accounts by users, and
- Organisations, notifications in Ops Control by Focal Points

are Key to LADR success and capability to notify operational stakeholders.



Users are encouraged to explore LADR's functionality and collaborate to support further enhancement and operational usage of LADR.



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Thank you!

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www.eurocontrol.int



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MANAGER

