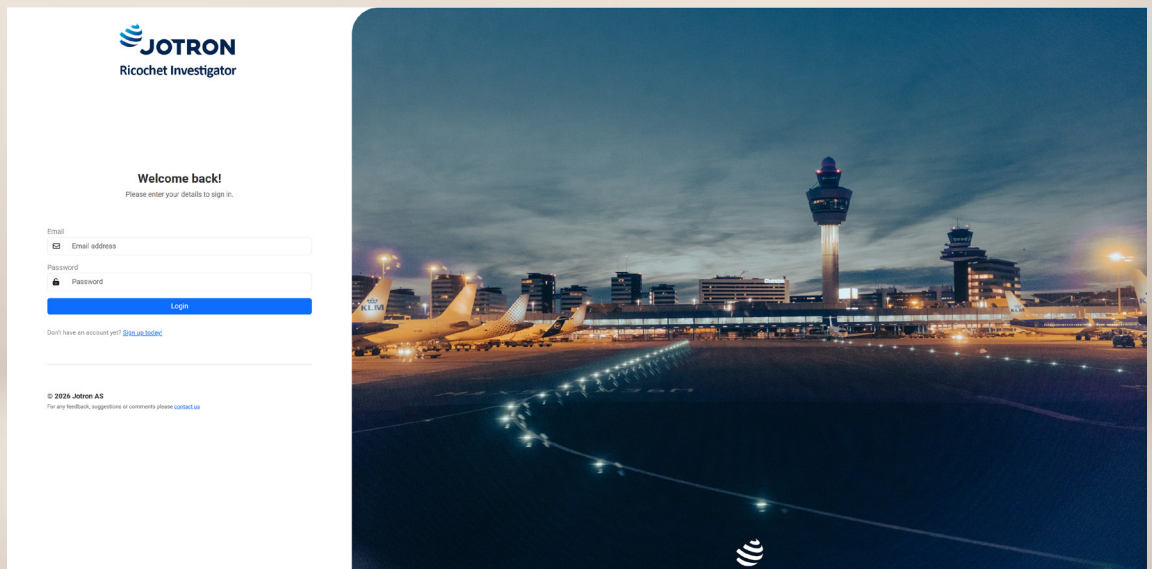


Ricochet Investigator

Smart and easy incident data analysis



- AI-enhanced speech to text transcription
- Very high accuracy
- Extremely time saving
- Easy to use interface
- Smart colour coding for info at a glance
- Secure by design

Ricochet Investigator

Real time saver

In the field of traffic incident investigation, accuracy, speed, and thorough documentation is critical.

Jotron have designed Ricochet Investigator specifically to meet these strict demands. It gives investigators advanced data collection and transcription capabilities that transform recorded media into precise, searchable text. The text also includes accurate timestamps, which are usually very time-consuming to create.

Whether analysing radio communications, control tower exchanges or cockpit voice recordings, this tool provides a streamlined solution to transcribe and review conversations that may be essential to understand incident dynamics.

Highly adaptable

Built with investigators in mind, Ricochet Investigator reduces transcription time, ensuring that teams can focus on the critical analysis of incidents rather than the manual task of transcribing. Additionally, it is highly adaptable, making it an ideal choice for personnel training scenarios where they can use realistic, transcribed data to simulate and understand complex situations.

This tool not only improves investigative efficiency but also supports higher standards of accuracy and consistency, reinforcing the integrity of investigative and training workflows in traffic management.

Ricochet Investigator can stand alone as a separate product, but it is also a part of the Ricochet record and replay product family and integrates closely with the Ricochet system.

Modular container based design

Ricochet Investigator is a software system that uses a server-client architecture, enabling multiple users to access data and collaborate efficiently. Users can access the system using modern web browsers, such as Google Chrome.

The system is modular, composed of multiple Linux containers, each having specific tasks. Depending on the scalability and performance requirements, customers can deploy these containers on one or multiple computers.

Optimized performance

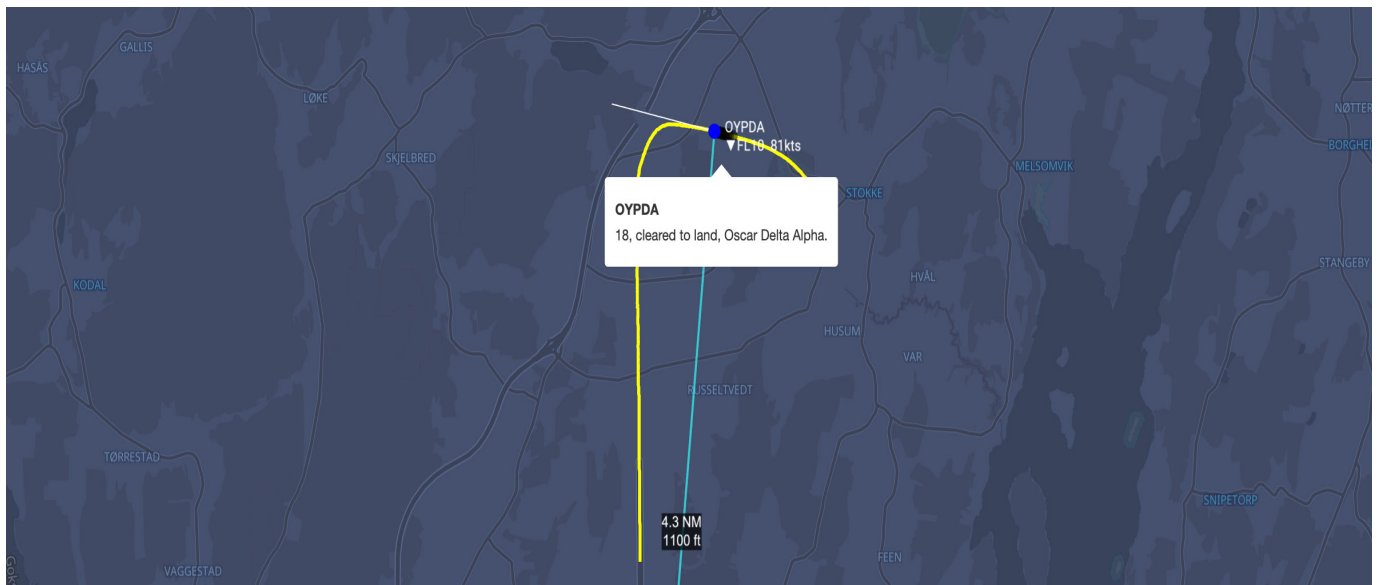
Ricochet Investigator uses an advanced automatic speech recognition (ASR) system, which employs commercial off-the-shelf (COTS) machine learning (ML) and artificial intelligence (AI) models to automatically transcribe audio data into a searchable text.

Jotron train and adjust these COTS models to optimize performance for air traffic control (ATC) communications and other similar types of radio-based communications, which often have varying audio quality.

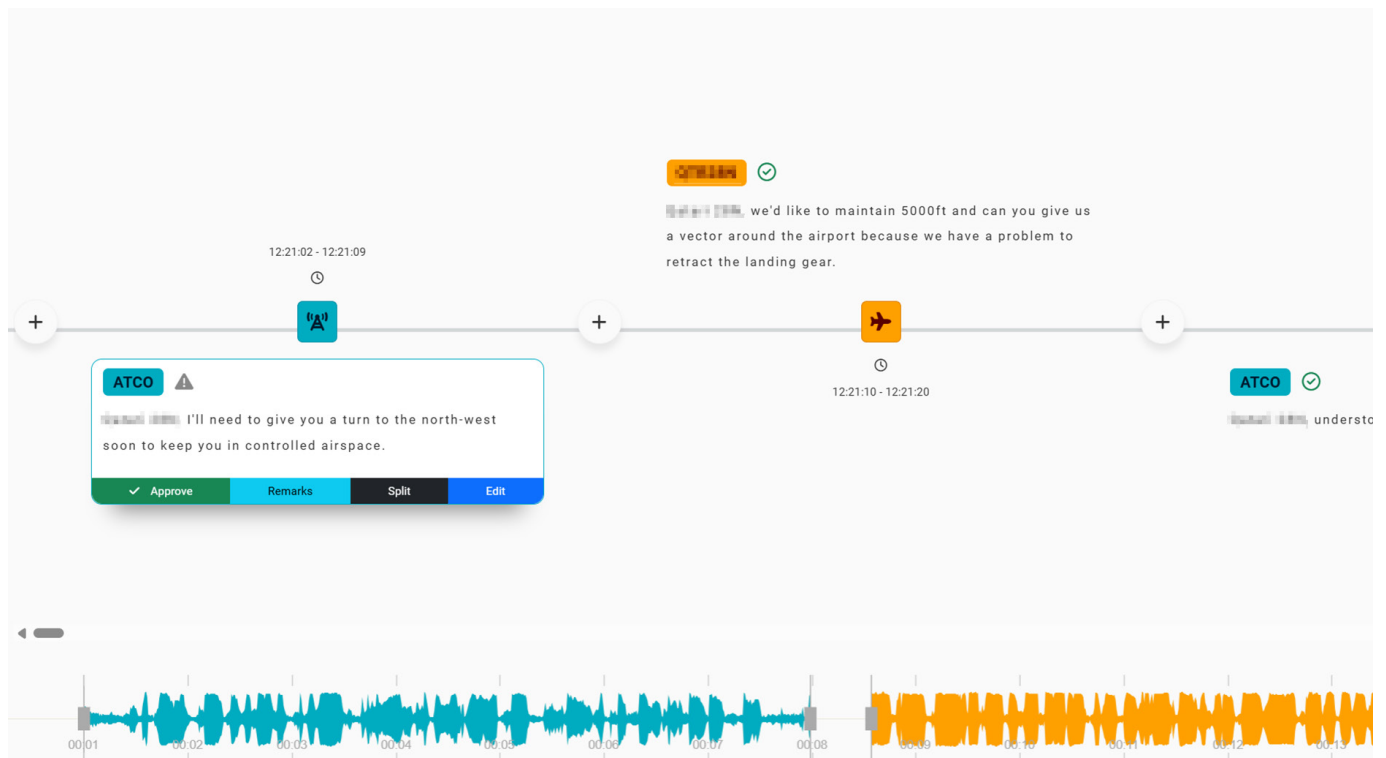
Customer improvements

To further improve recognition accuracy, customers can configure and add specific keywords to the ASR engine during the transcription. Examples for keywords: waypoint names, specific locations names and similar.

The Ricochet Investigator system installation provides all required AI and ML models.

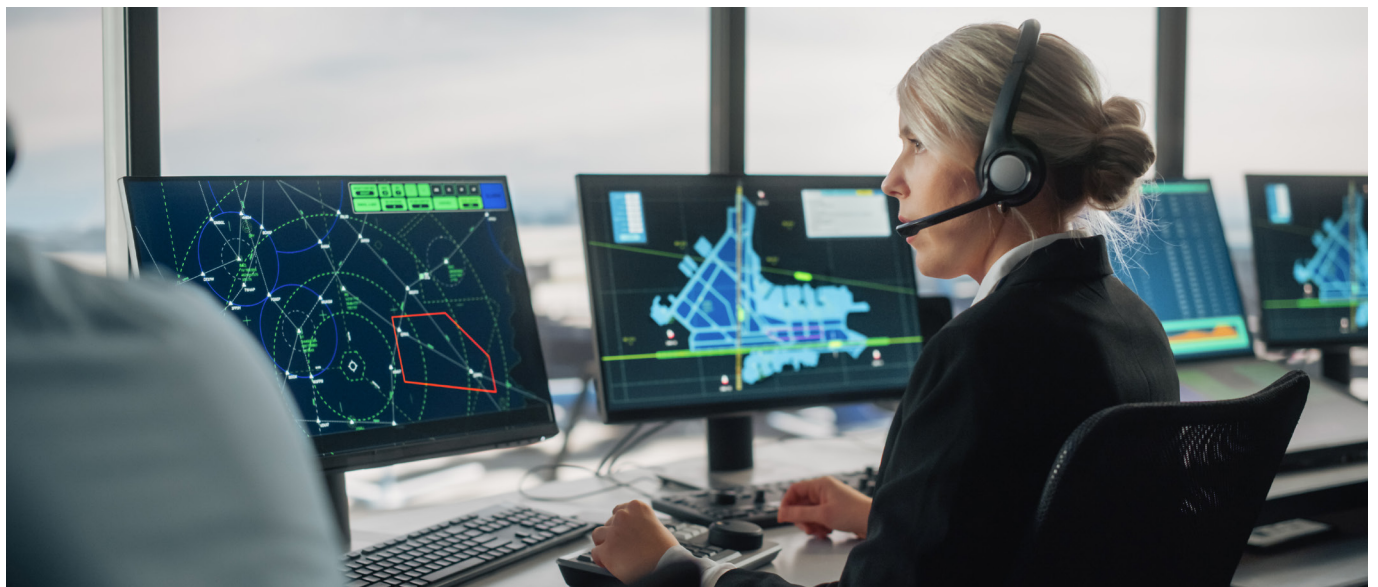


The ultimate tool for incident data analysis



Key features:

- Secure by design
- Easy and elegant user interface to help working with transcriptions
- Intelligent use of colour coding provides information at a glance
- Automatic transcriptions using built-in AI-enhanced speech-to-text engine
- Import of data from multiple sources or legal recorders
- Able to eliminate noise from recordings, improving the clarity of what is being said
- Generate reports in several formats (MS Word, *.txt, *.csv)
- Stores incident data securely in one place
- Share information easily between multiple investigators with access control



Jotron Ricochet Record and Replay

Ricochet is Jotron's world-leading synchronised recorder and replay system for Air Traffic Control (ATC), Vessel Traffic Service (VTS), coastal and offshore communications.

Ricochet captures, replays and analyses all data, ready to deliver the total scenario when reconstruction of an incident is imperative. The recording concept is flexible and modular, allowing an unlimited number of channels to be recorded simultaneously. All recorded data can be replayed synchronously with milliseconds precision. The recorder is fully compatible with all ED137C compliant radios and it is based on COTS hardware. Ricochet meets the specific demands of world-wide ATC and VTS environments, and the system is fully compliant to both national and international standards.

Recording

Ricochet supports a wide range of data interfaces and protocols. Essentially, all data streamed on a serial line or an IP network can be recorded.

All data is time-stamped and indexed enabling accurate and prompt response times during replay. Numerous time sources are supported, including NTP, NMEA, IRIG_B and Warton.

Replay

The replay user interface is very intuitive and is easy to learn. The main window displays a visualisation of recorded data on a timeline. Ricochet replay provides superior input response times, without prior preparation.

Replay commences immediately, and selecting and deselecting channels or changing replay time is done with a single click.

Ricochet includes a generous amount of replay tools such as; individual volume controls, left or right speaker control, an audio analyser for slow speed replay with pitch control, looping, fast forwarding, bookmarking, video zooming, panning, snapshotting and data forwarding options for more advanced applications. Realtime monitoring functionality is also available.

Cybersecurity

Jotron is ISO 27001 certified and all our products are designed and developed with a strong focus on cybersecurity. Some of the measures Jotron has implemented in our Ricochet software are:

- Modular design to enhance security and isolation (layered structure)
- Support for encrypted data storage
- Role-based access control and authentication
- Support for encrypted communication (TLS) between front-end and back-end
- Antivirus compatible front-end and back-end
- Assisted firewall configuration
- Cryptographically signed libraries, executables, and installers
- Secure monitoring through SNMP v3
- Configuration integrity validation and monitoring

Investigation

Ricochet Investigator is an exciting product that customers may add to their Ricochet system. It gives traffic incident investigators the ultimate tool for incident data analysis with AI-enhanced speech-to-text transcription and noise removal for audio enhancement.

