

AERON

GLOBAL AVIATION REGISTER WITH DECENTRALIZED RECORD SYSTEM

Blockchain Solutions for Aviation

Historically, general aviation has been a fragmented industry. There is a substantial challenge to locate a reputable flight school or a small aircraft charter, especially while travelling overseas. Aircraft owners strive to unlock value and get connected to prospective renters. Private pilots look for flight sharing arrangements or time building to maintain their licenses up-to-date. To bridge this information gap, and make information available in unified and accessible form, Aeron has been building a decentralized, global small aircraft and flight school database and an online portal.

Additionally, each aircraft owner has to keep maintenance logs for the airframe and engines, as well as pilots have to maintain flight logs to record their progressive experience. Till date, these logs are based on obsolete processes and mainly exist in paper form with manual signatures and attestation stamps. Imagine frustration of an aircraft owner, once the paper records are misplaced. It may be costly or impossible to restore such records and aircraft airworthiness can be jeopardized. In extreme cases, mere loss of records can lead to an aircraft being grounded indefinitely. A private pilot has to carry and present a heavy logbook folder, or lose an official record of flying hours.

National aviation authorities have no universal mechanism to control integrity and authenticity of such logs electronically. There are no international standards or comprehensive technology for electronic logging. Each country maintains its own log book formats and establishes national rules for processing and validation of the logs.

The legacy system is not equipped to handle the ever-increasing number and variety of small aircraft and licensed private pilots operating worldwide. This leads to a less than optimal experience for many people involved.

Aeron has a solution to this logging conundrum based on blockchain technology. It will enable an online system relying on Aeron Register, built on Ethereum blockchain to track aircraft and pilot log records, as well as ARN, a utility token to enable the development of a thriving, self-sustaining ecosystem around the database and token holders. True “airline in a pocket” featuring integrity, reliability and easy validation.

We believe that aviation safety is closely related to record integrity. Once the log records are stored in blockchain, available for public audit and can’t be forged, both authorities and passengers can be confident that a pilot actually has the experience claimed. Taking this a step further, the same system can be applied to aircraft maintenance records and tracking of spare parts, to confirm that spare parts are authentic, maintenance has been performed according to standards and there are no shortcuts.

The system described above could be supported by smart contracts that contain various log records, as well as execute rental deeds or charters for the aircraft, or cost sharing agreements between private pilots and their passengers; combined with a sleek user interface to allow for engagement with the blockchain, and a defined protocol to ensure transactions occur in compliance with local regulations. Aeron (ARN) utility token would be required for write access to the Aeron Register and other on-chain events.

Aeron token would also have a real-world application, as it could be envisaged as a mean of payment for small aircraft charters or promotional leisure flights, with aircraft owners having signed up for partnership arrangements with Aeron.

Aeron will work with national aviation authorities and international aviation agencies including EASA and FAA, to promote acceptance of the electronic log records based on blockchain, to demonstrate integrity, reliability and transparency of record keeping. A smart phone application will ultimately replace obsolete paper records and would gain a global acceptance, enabling a single point of reference for licensed private pilots, aircraft owners and operators, aviation enthusiasts and general public interested in aircraft charters, leisure flights and pilot training.

Product Development

While we keep building the global small aircraft and flight school database, the scope of our current prototype of logging application should be narrowed to prioritize for the fast adoption in one of our first markets in Europe. It is complied with the existing legal framework and will further refer to the legacy flows relative to logging of data.

Under the Aeron target “airline in a pocket” model, every single step from the initial aircraft and pilot registration, through the signing of maintenance and flight logs, along with actions like small aircraft rentals or charters, would be recorded on blockchain and executed with smart contracts.

However, we recognize the significant complexity of blockchain technology and are building a multi-stage Aeron Register solution to be phased in over time. The Aeron team works actively on several fronts to ensure that we are building the correct solution that can solve the problems of stakeholders, while also complying with all regulations.

Ultimately, we would like to extend our solution to contribute to flight safety, by recording the aircraft maintenance events and tracking the spare parts. This requires close cooperation with maintenance organizations and spare parts manufacturers worldwide, turning the Aeron Register into a reference for verifying parts authenticity.

Live Today	Short-Term	Long-Term
Online Portal www.aerotrips.com	Application Beta and Online Portal	Application and Online Portal
No blockchain	Partially decentralized	Fully decentralized
Traditional payment system on portal	Traditional and cryptocurrency payments	Traditional and cryptocurrency payments
Global database	Global database	Global database
	Application in Europe	Application globally
Status: Live and active users	Status: Concept development	Status: R&D assessment

Business Model

Aeron has a simple and scalable business model. When any transaction which involves payment between counterparts is concluded (as example an aircraft charter or a leisure flight booking), Aeron takes a small percentage (starting from 2% and averaging ~5%) of the total consideration payable by the user. The payments are initially processed by traditional payment system on the online portal, in fiat, and cryptocurrencies will be added as a mean of payment for the jurisdictions where possible. Payment would also be made possible with Aeron tokens, introduced in this document. For Aeron Register write access with signing of log records, Aeron will charge a small transactional fee.

About Aeron Tokens

We introduce Aeron (ARN), an ERC20 compliant Ethereum based token, with a fixed supply of 100,000,000 ARN. During the token launch, a fixed amount of ARN is created, and afterwards no more tokens shall be minted. Aeron utility tokens are created to fund

development and marketing of the Aeron project with associated distributed database, online portal and applications, as described in this document.

Because Aeron is built on the ERC20 token standard, it allows for simple integration into users' wallets and is freely tradeable via direct transfers or via smart contracts. It is possible that Aeron token could also be added to cryptocurrency exchanges.

The total supply of ARN will slowly decrease over time, as tokens are taken out of circulation, for example, when someone with ARN loses their private keys, therefore, ARN will be effectively deflationary. Once Aeron receives ARN for services rendered, then a portion of the total amount received is redistributed to Aeron token holders.

For Aeron Register write access with signing of log records and validation on the blockchain, Aeron will charge a small transactional fee in ARN.

Such tokens paid for writing data to the Aeron Register will be stored in a special rewards smart contract on the Ethereum blockchain. These aggregated amounts of tokens will be paid out to the token holders, proportional to the ARN owned. The rewards contract will generate a token distribution snapshot every month and distribute rewards according to the snapshot. Such snapshot is permanently stored in the blockchain, so anyone can verify that rewards were distributed correctly.

The Aeron token contract address will be published at www.aeron.aero.

Token Sale Process and Participation

60% of the fixed 100,000,000 supply of ARN are being offered for sale, equating to 60,000,000 ARN. That will be sold in two stages with limited pre-sale, which requires registration, followed by the public general sale. ARN can be obtained online at a price per token of 1 ARN = \$0.5 (fifty US cents) with payment in cryptocurrencies accounted

at a current exchange rate at the date of transaction. Bitcoin (“BTC”) and Ether (“ETH”) will be the only methods of payment accepted in the general sale.

To obtain Aeron tokens, follow the instructions posted at www.aeron.aero and refer to Q&A available on the Frequently Asked Questions page at www.aeron.aero/faq.html.

DO NOT send any ETH from an exchange wallet or from an address for which you do not control the private keys. Although ARN tokens will be allocated and sent to the address from which ETH have originated, if you do not have control of the private keys, then you may not be able to view or transfer the ARN once they are at that address.

The token sale will be offered until all 60,000,000 ARN have been distributed. Bonus scheme may be introduced to incentivise the early buyers. The amount of ARN distributed and remaining can be tracked at www.aeron.aero during general sale.

The remaining 40% of the supply (40,000,000 ARN) are not available via the token sale and will be allocated as follows: 20% of the tokens will be distributed over period of time to achieve network growth, particularly offered to potential bulk users of the Aeron Register, so they join the ecosystem and promote Aeron, as well as offered to governments to incentivise them to use the Aeron Register. 18% of the tokens will be allocated to the development team, whose work makes Aeron possible. Remaining 2% of the tokens will be used to cover administrative costs of the token sale.

Aeron’s ambition is to propel small aviation management into the digital era and revolutionize the industry. That will take experience, connections, and resources. We welcome your interest and support.

Terms and Conditions

This section informs you of the Terms and Conditions governing use of the information and functionality offered at www.aeron.aero ("Web site") including this present document. By using the Web site, you agree to be bound by these Terms and Conditions.

1. The Web site does not constitute a prospectus of any sort, is not a solicitation for investment and does not pertain in any way to an offering of securities in any jurisdiction.
2. By transferring ETH, BTC, or any other cryptographic tokens ("Cryptocurrency") to obtain Aeron tokens ("ARN" or "ARN tokens") and/or receiving ARN, no form of partnership, joint venture or any similar relationship is created between the user and the creators of ARN and/or any other individuals involved with the Web site or ARN.
3. By transferring Cryptocurrency to obtain ARN tokens and/or receiving ARN, the user confirms that the user is neither a United States citizen nor resident, and the user does not have a primary residence or domicile in the United States, including Puerto Rico, the U.S. Virgin Islands, or any other territories of the United States, and the user is not acting on behalf of United States citizen, resident or entity.
4. By transferring Cryptocurrency to obtain ARN tokens and/or receiving ARN, the user expressly represents and warrants that:
 - a. The user has a deep understanding of the functionality, usage, storage, transmission mechanisms and intricacies associated with cryptographic tokens and blockchain-based software systems;

- b. The user has carefully reviewed the code of the smart contract located on the Ethereum blockchain at the addresses set forth on the Web site and fully understands and accepts the functions implemented therein;
- c. The user is legally permitted to transfer Cryptocurrency to obtain ARN tokens, and is legally permitted to obtain ARN in the user's jurisdiction;
- d. The user is legally permitted to receive software and interact with the ARN tokens smart contract;
- e. The user is of a sufficient age to legally obtain ARN tokens;
- f. The user will take sole responsibility for any restrictions and risks associated with obtaining ARN tokens by the smart contract system;
- g. The user is not submitting Cryptocurrency to obtain ARN for the purpose of speculative investment;
- h. The user is not obtaining or using ARN for any illegal purposes;
- i. The user waives the right to participate in a class action lawsuit or a class wide arbitration against any entity or individual involved with the Web site or with the creation or distribution of ARN tokens;
- j. The user understands that submitting Cryptocurrency to obtain ARN does not involve the purchase of shares or any equivalent in any existing or future public or private company, corporation or other entity in any jurisdiction;
- k. The user understands and expressly accepts that there is no warranty whatsoever on ARN, expressed or implied, to the extent permitted by law, and that the smart contract system is used and ARN are obtained at the

sole risk of the user on an “as is” basis and without, to the extent permitted by law, any warranties of any kind, including, but not limited to, warranties of title or implied warranties, merchantability or fitness for a particular purpose;

1. The user understands that the user has no right against any party to request any refund of the Cryptocurrency submitted to obtain ARN tokens under any circumstance;
 - m. The user understands that the user bears the sole responsibility to determine if the transfer of the Cryptocurrency to obtain ARN tokens, the obtaining, ownership, or use of ARN, and/or any other action or transaction related to ARN may have tax implications for the user;
 - n. By obtaining, owning or using ARN, and to the extent permitted by law, the user agrees not to hold any party liable for any tax liability associated with or arising from obtaining, owning or using ARN or any other action or transaction related to the Web site.
5. The user acknowledges and agrees that, to the fullest extent permitted by any applicable law, the user will not hold any developers, contractors or creators of ARN tokens and/or the Web site liable for any and all damages or injury whatsoever caused by or related to the use of, or the inability to use, ARN tokens or the Web site under any cause or action whatsoever of any kind in any jurisdiction, including, without limitation, actions for breach of warranty, breach of contract or tort (including negligence) and that developers, contractors or creators of the Web site and/or ARN tokens shall not be liable for any indirect, incidental, special, exemplary or consequential damages, including for loss of profits, goodwill or data, in any way whatsoever arising out of the use of, or the inability to use the Web site and/or ARN tokens.

6. By obtaining, holding or using ARN tokens, and to the extent permitted by law, the user agrees not to hold any third party (including developers, contractors or creators) liable for any regulatory implications or liability associated with or arising from obtaining, owning or using ARN or any other action or transaction related to the Web site.
7. The user understands and accepts that the network of miners will be ultimately in control of the ARN tokens smart contract. The user understands that a majority of these miners could agree at any point to make changes to the official smart contract system and to run the new version of the smart contract system.
8. The user agrees that if any portion of these Terms and Conditions is found illegal or unenforceable, in whole or in part, such provision shall, as to such jurisdiction, be ineffective solely to the extent of such determination of invalidity or unenforceability without affecting the validity or enforceability thereof in any other manner or jurisdiction and without affecting the remaining provisions of the Terms and Conditions, which shall continue to be in full force and effect.
9. These Terms and Conditions are effective as of 1 July 2017 and will remain in effect, except with respect to any changes in their provisions in the future, which will be in effect immediately after being posted at www.aeron.aero/terms.html. The Terms and Conditions can be updated or changed at any time and you should check these Terms and Conditions periodically. Your continued use of the Web site and/or ARN tokens after any modifications to the Terms and Conditions are posted at www.aeron.aero/terms.html will constitute your acknowledgment of the modifications and your consent to abide and be bound by the modified Terms and Conditions. For any material changes to these Terms and Conditions, we will notify you either through the email address you have provided on the Web site, or by placing a prominent notice at www.aeron.aero/terms.html.