**CONCLUSION**

Our research showed that aircraft delay predictions may be made with good accuracy using machine learning methods. In addition to evaluating delays for different human requirements, the previously mentioned categorization and analysis aims to closely examine elements that impact delays, including ‘weather delay,’ ‘airline delay,’ and ‘security delay.’ The SVM model performed the best, correctly categorizing delays into two groups using the previously mentioned parameters including ‘Departure Time,’ ‘Air Time,’ and ‘Month’—with 100% accuracy. Thus, it can be effectively used to predict flight delays, which will be beneficial for airports and airlines, as well as passengers. Therefore, the study of flight delays presented in this paper is grounded entirely in scientific parameters, underscoring its crucial significance in the aviation industry.