



10 Years in the Service of Science

Introduction

On June 30, 2009, the first issue of the scientific and technical journal of “Almaz – Antey” Air and Space Defence Corporation came off the press. Over 10 years, the following results have been achieved:

- 394 articles were published by 527 authors;
- the publication frequency increased twice;
- Editorial Board expanded three-fold;
- number of topics of the published articles increased five-fold;
- circulation increased four-fold.

Background

At the end of 2007, the Presidium of the Higher Attestation Commission of the Ministry of Education and Science of the Russian Federation published a decision on approval of the list of organizations entitled to issue scientific journals for publishing the results of restricted studies of candidates for a degree. The Corporation was included in this list, and as early as on September 19, 2008, the management decision initiated the work on a new journal.

In 2011, following the reasoned petition of the Corporation General Director, the Journal changed its status to non-restricted and was included in the List of non-registered publications of the main results of doctoral and candidate’s theses (HAC List). The restricted journal has continued to be published once a year under another name.

Evolution

The number of submitted articles has increased with time (Fig. 1), thus increasing the frequency of publication. Hence, starting from 2009, the Journal has been issued twice a year, and from 2016 – four times a year.

During the existence of the Journal, the topics became significantly more numerous.

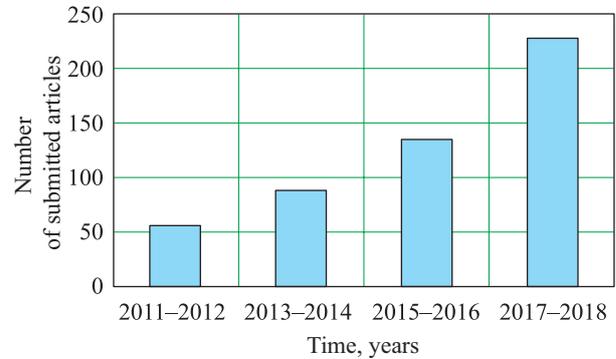


Fig. 1. Articles submitted to non-restricted journal

Originally, mainly the radio engineering articles were published in the Journal. In recent years, authors have actively been publishing in the Space Research and Rocket Science section dedicated to gas and hydrodynamics, material resistance, continuum mechanics, jet engines, aerodynamics, space research and issues related to modelling of these processes. The Editorial Office also receives articles about industrial management and metal processing. Besides, articles on history are published in special sections of the Journal, such as Personalities and Events.

According to the electronic library of scientific publications *eLibrary.ru*, over a period of eight years, the disciplines of articles published by the Journal have remained consistent. The sections of non-restricted journal meet needs of the Corporation specialists related to these publication (Fig. 2).

Starting from 2015, following the world trends in scientific articles review, a so-called double-blind review process has been introduced in the Journal. Double-blind review means that, on the one hand, an article is sent to a reviewer without indicating the authors’ names, and on the other hand – the reviewer’s name is not communicated to the author as well. Thus, the objectiveness that accompanies the anonymity increases the level of the manuscript assessment. It should also be noted that, starting from 2015, every article has been sent to two reviewers or more.

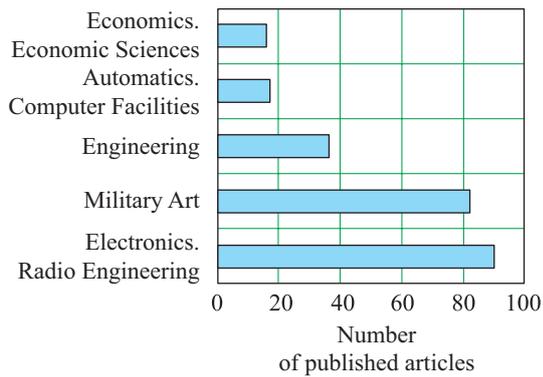


Fig. 2. Published topics (according to eLibrary.ru)

This increases the level of manuscript expert assessment and, consequently, the journal level.

Starting from 2015, the Journal issues are freely available at the Corporation website and indexed by the web search engines. The traffic of articles downloading from the Corporation website remains high, and the total number of articles downloaded from the website has approached 15,000.

Starting from March 2015, the Journal has launched e-mail distribution informing interested readers on the next release of the Journal freely available on the Internet. The distribution list includes approximately 1000 e-mails, and their number is increasing by approximately 100 addresses annually (Fig. 3).

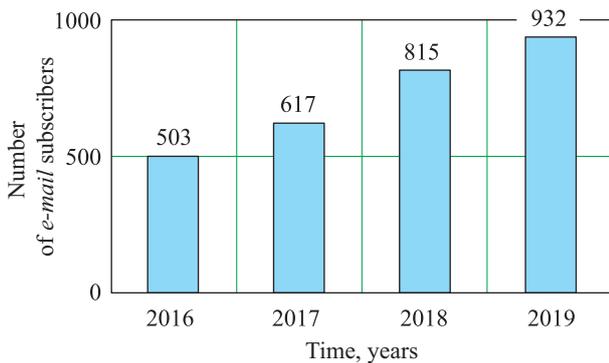


Fig. 3. E-mail subscribers list growth chart

Development

At the end of 2017, the Journal Editorial Board management made an innovative move for renewing the members of the Editorial Board. For involving young scientists of the Corporation

enterprises in the articles review, a letter has been sent to the enterprises, inviting to establish a list of subsidiaries’ workers with a scientific degree and younger than 40. The majority of 38 proposed candidates (Fig. 4) takes active part in the review of manuscripts on the Journal topics.

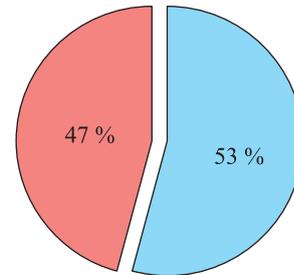


Fig. 4. The Editorial Board members grouped by age:
 ■ – 40 and less; ■ – over 40

The idea of involving young people paid off. Thus, 72 % of the Editorial Board members, being the reviewers of articles published in issue No. 2-2019 of the Journal, are younger than 40 (Fig. 5).

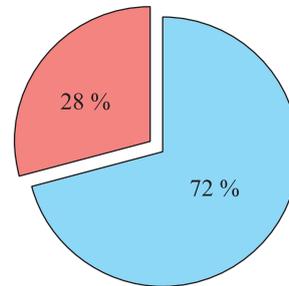


Fig. 5. Percentage ratio of articles review by young scientists:
 ■ – 40 and less; ■ – over 40

The duration of reviews by the Editorial Board reduced with time. The trend of papers review prior to their publication within eight months (on average) was overcome as early as in 2017, and in 2018 this period was cut in half (Fig. 6). Young scientists of the Corporation enterprises and third-party organizations played an important role in this process.

In 2018, the editorial team started to award the most active reviewers based on the results of their work. In particular, in 2017, 15 employees of the Corporation (of them 10 are young scientists)

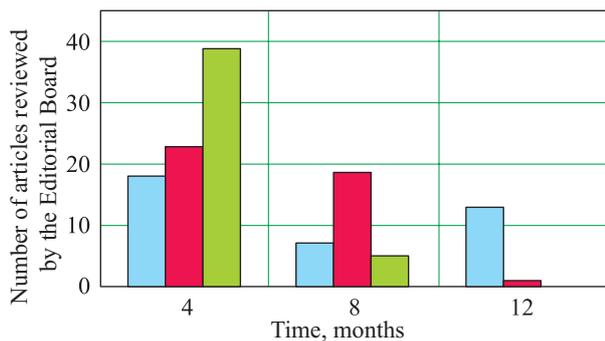


Fig. 6. Period of article preparation from the beginning of review to its publication in the Journal:
 □ – in 2016; ■ – in 2017; ▨ – in 2018

were awarded, in 2018 the number increased to 24 (of them 20 are young scientists). By the order of the Corporation General Director, every employee was awarded a commendation.

Engagement of new authors is an important measure of any scientific journal. It should be noted that the number of Journal authors continuously increases. New authors interested in publication

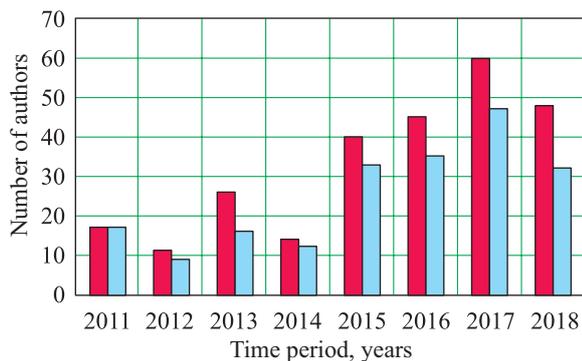


Fig. 7. Ratio of new and known authors (according to *eLibrary.ru*):
 ■ – authors; □ – new authors

are coming to the scene, on average their number amounts to almost 80 % of the total pool of the published authors (Fig. 7).

Science is a collective work: 75 % of Journal articles were published by composite authors. Fig. 8 shows the number of co-authors in articles according to the electronic library of scientific publications *eLibrary.ru*

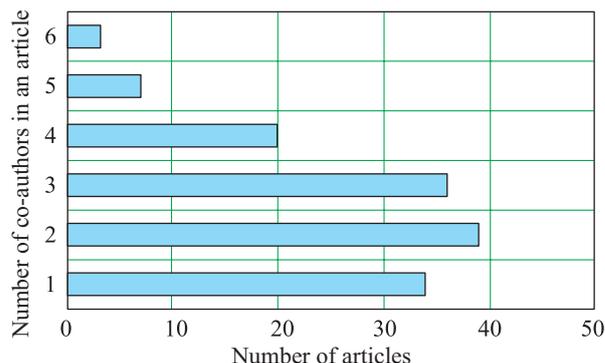


Fig. 8. Number of co-authors in articles (according to *eLibrary.ru*)

All in all, it can be confidently stated that the journal is successfully operating and actively developing, including using modern web-promotion methods.

We are open for dialogue with our readers. Please send your proposals on expanding our journal distribution, promotion on the Internet, social media and international databases, improving its quality and content to Editorial Office e-mail press@almaz-antey.ru

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