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... , 15, 49005, ... ; e-mail: aalpatov@ukr.net

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The aim of this work is a system analysis of the engineering features of the deorbiting of space debris fragments. New results reflect a possibility to change the concept of near-Earth space debris mitigation from space debris elimination to space debris utilization. The paper presents a brief analysis of different aspects of the problem of space debris mitigation in near-Earth space. Different methods and means to prevent the space debris formation and to reduce space debris population are considered. Scientific problems involving the development of methods and means for near-Earth space debris mitigation are formulated.

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(1500–2000) 36000 [1].

(300–800)

© ... , 2018

– 2018. – 1.

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 , US Space Surveillance Network, -
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[1, 2].

Nicholas Johnson (),

(ctive debris removal, ADR).

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[1 – 3].

(IAF),

(COSPAR),

(ITU),

(ICJ).

(IADC)

(STCS UN COPUOS).

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[1 – 4].

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Electro Dynamic Debris Eliminator (EDDE)

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EDDE

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Electro Dynamic Debris Eliminator.

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(Gossamer Orbit Lowering Device,

GOLD

System).

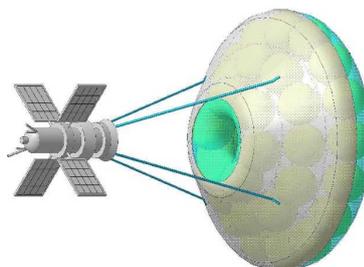
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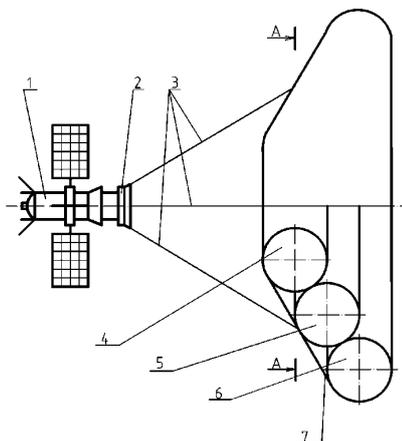
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| , | 0,75 | 1,92 | 3,9 | 6,81 |
| , | 41,05 | 167,32 | 476,4 | 1104 |
| , ² | 37 | 156 | 452 | 1041 |

CleanSpaceOne EPFL

[1 – 3].

Surrey Space Centre

HybridSail —

[2, 3, 15].

GIT Satellite.

[2, 3].

Extreme Universe Space Observatory (EUSO).

CAN,
CAN

[16].

[8 – 11].

[8, 11, 15].

[1, 3]

[1, 16]

[17].

[18 – 20].

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Boeing Aerospace Corp., Lockheed Martin, Grumman Aerospace Corp., Rockwell Inc., EADS Astrium, Ontario Power Generation, Space Energy Inc.

(ADR),

[14].

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[16].

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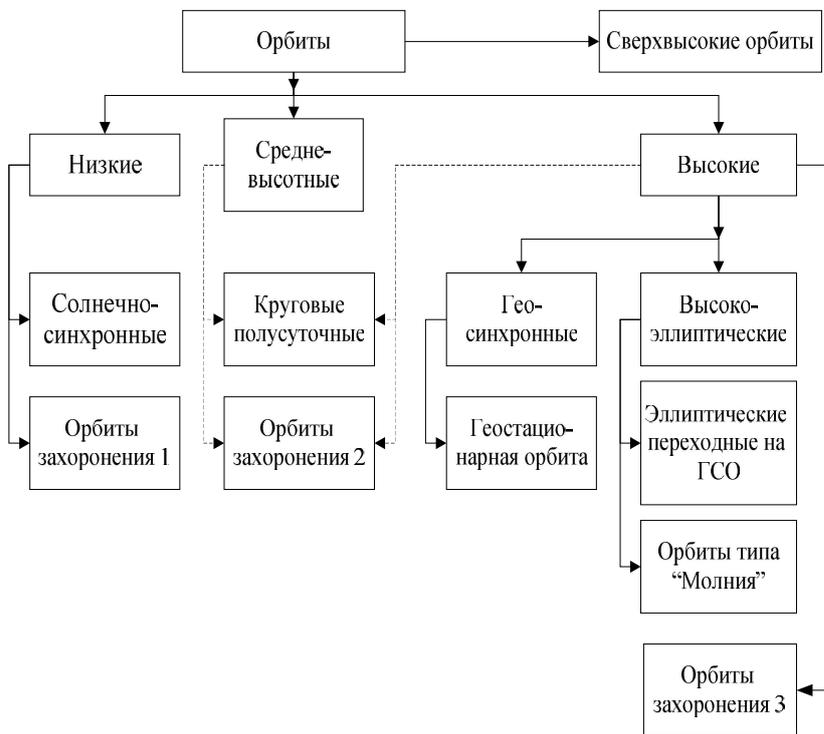
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NORAD 15000

(, , <http://www.space-track.org>),

NORAD ()

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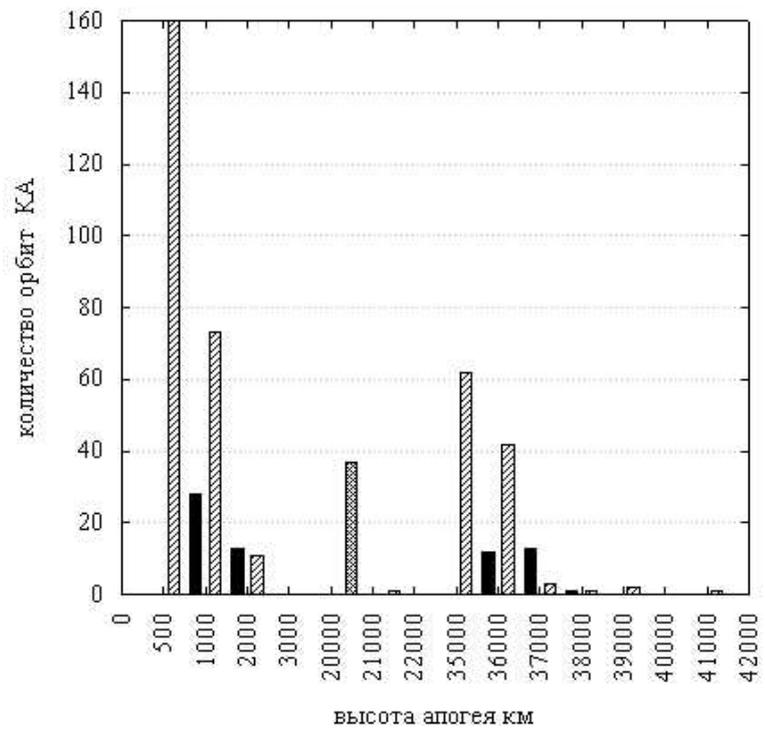
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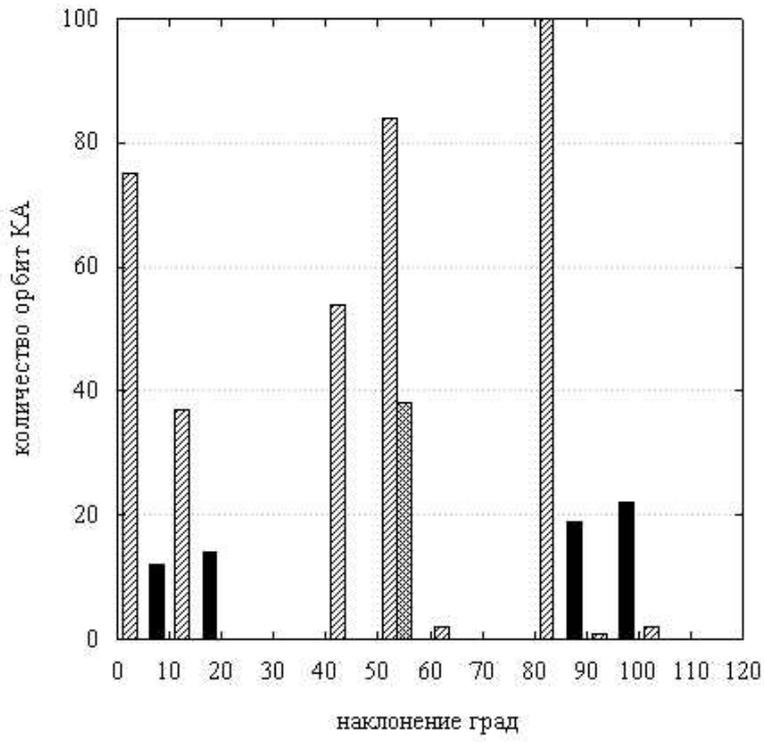
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Made In Space,

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30 20 50

(High Velocity Impact - HVI);

(Mitigation and Standards),

(Modelling and Risk Analysis)

(Hypervelocity
Impacts and Protection).

(Space Debris Removal Concepts).

(Operations in Space Debris Environment,
Situational Awareness).

(Political, Economic and Institutional Aspects of Space Debris
Mitigation and Removal).

