



20

Planet spotting

Earthlike exoplanets seem almost certain to exist somewhere in the galaxy, and delivering a photograph of one might be astronomy's most amazing achievement. Technologists are trying to make that possible, and maybe sooner than you think.

By Adam Hadhazy

28

Carrier drone debate

The Navy has decided that its first full-sized carrier-based unmanned aircraft will be a refueling drone with some intelligence capabilities, rather than an unmanned equivalent of an F/A-18. For some, it's a big letdown, and possibly a dangerous one.

By Keith Button

34

Springboard

Getting humans to the moon or Mars will almost certainly need to be an international endeavor like the construction and on-orbit assembly of the International Space Station.

By John Cook

38

Freedom from Russian engines

How the U.S. military and intelligence communities became dependent on rocket engines from a geostrategic foe and how to avoid a repeat.

By James Knauft

On the cover: Artist's rendering of Kepler-186f, the first Earth-sized planet detected orbiting a hospitable zone near a star other than our sun.

Image credit: NASA Ames/SETI Institute/JPL-Caltech

EDITOR-IN-CHIEF

Ben Iannotta
beni@aiaa.org

ASSOCIATE EDITOR

Kyung M. Song
kyungs@aiaa.org

PRODUCTION EDITOR

Greg Wilson
gregw@aiaa.org

EDITOR AIAA BULLETIN

Christine Williams
christinew@aiaa.org

EDITOR EMERITUS

Jerry Grey

CONTRIBUTING WRITERS

Keith Button, John Cook,
Kristin Davis, Adam Hadhazy, Duane Hyland,
Tom Jones, James Knauf, Michael Peck,
Robert van der Linden, Frank H. Winter

James "Jim" Maser **PRESIDENT**

Sandra H. Magnus **PUBLISHER**

Rodger S. Williams **DEPUTY PUBLISHER**

Craig Byl **MANUFACTURING
AND DISTRIBUTION**

ADVERTISING

Joan Daly, 703-938-5907
joan@dalyllc.com

Pat Walker, 415-387-7593
walkercom111@gmail.com

ADVERTISING MATERIALS

Craig Byl, craigb@aiaa.org

ART DIRECTION AND DESIGN

THOR Design Studio | thor.design

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Shaping the Future of Aerospace

IN THIS ISSUE



Keith Button

has written for C4ISR Journal and Hedge Fund Alert, where he broke news of the 2007 Bear Stearns hedge fund blowup that kicked off the global credit crisis. Keith's article "Carrier drone debate," on page 28, examines the U.S. Navy's decision to make a carrier-based refueling drone.



John Cook

worked as an engineer on the International Space Station and space shuttle programs. John's article about the space station's on-orbit assembly and what it says about the future, "Springboard," appears on page 34.



Adam Hadhazy

writes about astrophysics and technology. His work has appeared in Discover and New Scientist magazines. In "Planet spotting" on page 20, Adam tells us about technologies for imaging exoplanets.



James Knauf

retired from the U.S. Air Force as a colonel in 2006. Jim is chair of AIAA's Space Transportation Technical Committee. His analysis of the RD-180 conundrum, "Freedom from Russian rocket engines," begins on page 38.

DEPARTMENTS

4 Editor's Notebook

5 From the Corner Office

8 P&E Highlights

45 Bulletin

60 Career Opportunities

62 Looking Back

6

Trending

Northrop Grumman's Global Hawk: No de-icing necessary?

10

Q&A

Former astronaut Tony Antonelli on Mars exploration

16

Book Review

Leonard David's "Mars: Our Future on the Red Planet"

7

Appreciation

Rudolf E. Kalman

12

Astronaut's View

A newly discovered asteroid will orbit in loose formation with Earth for centuries.

64

Trajectories

Career turning points and future visions