

Publishing Your Story in Astronomy Magazines: How to Solicit and Write Magazine Articles

Robert Naeye

NASA's Goddard Space Flight Center

E-mail: robert.p.naeye@nasa.gov

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Summary

If you want to write a magazine article, here's some advice on how to pitch your article, how to write it and what you should expect once you have submitted your story.

Although their circulations are declining in the Internet Age, magazines remain one of the premiere outlets for communicating astronomy to a large audience. Publications such as *Sky & Telescope* and *Astronomy* in the United States, the *Tenmon Guide* in Japan, *Sterne und Weltraum* and *Astronomie Heute* in Germany, and *Astronomy Now* and the *BBC Sky at Night* in the United Kingdom reach tens of thousands of readers every month.

From 1991 to early 2007, I worked for four magazines, and have written, edited and commissioned many hundreds of articles on astronomy and related subjects. I started off as an editorial intern at *Sky & Telescope* in 1991. I next worked as a researcher/reporter at *Discover* from 1992 to 1995. I then moved to *Astronomy*, first as an associate editor and then later as a senior editor. In 2000 I left *Astronomy* to serve as editor-in-chief of *Mercury*, the bimonthly magazine of the Astronomical Society of the Pacific. In late 2003 I moved back to *Sky & Telescope* as a senior editor. I finally left the magazine business in

early 2007, when I assumed my current job as a senior science writer at NASA's Goddard Space Flight Center. In the interest of full disclosure, I remain a contributing editor for *Sky & Telescope* and will be the new editor-in-chief in June.

As far as I know, I am the only person who has ever worked as a full-time editor at both *Sky & Telescope* and *Astronomy* — by far and away the two largest-circulation astronomy magazines published in the US. I wanted to share some of my experiences to help anyone interested in communicating their ideas and passion for astronomy in a magazine article.

I want to stress that all magazines are different. Even though *Sky & Telescope* and *Astronomy* have similar formats and reach a similar audience, a close examination will reveal subtle, but important differences. More importantly, each magazine has its own way of "doing business". So what follows is a generalised impression from my 15 years in magazine publishing.

The Pitch

If you are interested in publishing an article in a popular magazine, the first order of business is convincing a publication's editorial staff that your story is worth publishing. You may think you have the greatest idea in the world, but until the editors of a magazine agree, your concept represents unrealised potential.

There are two ways to approach a magazine. First, you can write your article, and send the draft to the magazine and hope for the best. Editors refer to such stories as "unsolicited manuscripts". Occasionally, a scientist or writer submits an outstanding article out of the blue and the staff decides to publish it. But this is the exception rather than the rule. Sending unsolicited manuscripts gives an author no contractual protection in terms of payment or kill fees and basically puts the writer at the mercy of the magazine's staff. In addition, the author may waste considerable time and energy writing an article that will never see the light of day.

I strongly advise taking a second route: writing a query letter. This involves much less effort than writing an entire article, and can lead to a contract that can guarantee at least a modicum of protection for the author. Writing a query letter rather than a full article in no way diminishes your chances of having your article published.

Before you write your query letter, I recommend taking three courses of action:

1. Read a recent issue of the magazine to get a feel for its style and the type of person it is trying to reach. With this knowledge, you can write a more effective pitch.
2. Try to find out if the magazine has published an article on your subject, or a closely related topic, sometime in the recent past. If it has, approach a different publication first.
3. Try to identify an individual editor at your target magazine who would handle query letters on a certain topic. For example, during part of my earlier tenure at *Sky & Telescope*, I would review query letters about science topics. Other colleagues would review queries related to observing projects and equipment reviews. Your chances of having an article published improve if you can make your pitch to a specific editor rather than sending a letter addressed to the magazine in general. You might even consider calling the editor on the telephone to establish a personal connection.

The letter, which can be sent via snail mail or e-mail, should be no longer than 500 words. The query must describe what your article will be about and why it would be of interest to the magazine's readers. Remember that you are competing for precious space in the magazine. If the editors run your article, it means they won't run someone else's.

Your letter should be clearly written and should convey excitement about your topic. If you're not enthusiastic about it, why would anyone else be excited? Before sending your query, let several friends or colleagues read it to see if you've made a persuasive case, and whether your letter is clear and well written. The letter should demonstrate good writing skills to the editorial staff.

I also recommend sending a list of possible images and illustrations that could run with the article. Magazine editors are always thinking about an article's visual impact, and not just the words. If you can convince the editors that your article will be visually appealing as well as intellectually stimulating, you've greatly improved your odds of being commissioned to write the story.

Suggest how long your article will need to be to cover your topic. Remember that most magazines are running short feature-length articles these days. A typical six-page feature in a magazine such as *Sky & Telescope* or *Astronomy* might run no longer than 2000 to 2500 words. Think about possible sidebar topics as well, since magazine editors like their articles to have "multiple points of entry".

Write a short bio, perhaps no more than one or two sentences, to demonstrate your background and qualifications for writing the article. Give the editor a realistic deadline of when you can submit your completed draft, and be prepared to meet it. I would advise setting a due date no later than three months into the future.

Have an idea what you expect to be paid, but if the magazine contacts you to commission your article, let the editor make the first offer. If you're dissatisfied, you can always try to negotiate for a higher pay rate. Unless you are a well-established writer, don't expect to get rich by writing for magazines, and remember that many magazines are experiencing financial pressures. Your primary motivation for writing an article should be the desire to disseminate your ideas.

Last but not least, if you and the editor agree on the topic, length, due date and pay rate, insist on receiving a contract specifying the terms of the agreement, and make sure the contract stipulates that you will be paid upon acceptance of the article, and not on publication. If the magazine declines to publish your article, make sure you will be paid a kill fee that is at least 25 percent of the pay rate.

Writing the Article

So let's assume the magazine's editorial staff commissions you to write the article. What comes next? Most magazines provide a guideline for authors, so check it out at the website. But here are some general recommendations for effective science writing.

First, the introductory three to five paragraphs of the article, known to journalists as "the lead" (sometimes spelled "lede"), must grab the attention of readers and motivate them to continue reading your article. The lead must be written in crystal-clear language, foreshadow exciting things to come and give readers a firm understanding of what your story will be about. People will be reading your article in their leisure time; you must convince them at the start that it's worth 20 minutes of their precious time. Use non-technical language and dispense with details and jargon — those can come later. If possible, use humour. In newspaper articles,

the first paragraph almost always gets to the heart of the story. For magazine articles, it's usually acceptable to delay the lead to the third or fourth paragraph. But don't wait any later than that.

Here is an example of a lead I found particularly effective for its use of irony and humour. After reading this opening paragraph by Dutch science writer Govert Schilling in the December 1999 issue of *Astronomy*, just about anyone interested in astronomy would want to read the article:

Imagine a mirror the size of a basketball court — a vast expanse of glass, more than 30 meters in diameter, weighing some 150 tons and consisting of more than 250 hexagonal segments of two meters each. Got it? Okay, you're looking at the secondary mirror of next century's super telescope. That's right, the secondary. The primary, matching the size of a football field, lies 100 meters below, near the base of a telescope structure as high as the Great Pyramid. Welcome to the 100-meter OWL, or Overwhelmingly Large Telescope, which has 10 times the collecting area of all existing telescopes put together.

Ten-Point Checklist for Writers

1. Identify a topic you can write enthusiastically and authoritatively about.
2. Target a magazine and study its contents.
3. Go to the magazine's website and read any instructions for writers (for some magazines you might have to send a self-addressed stamped envelope).
4. Get an editor's name from the magazine masthead.
5. Don't write the article yet: first send the editor a preliminary letter pitching the article, with suggestions for illustrations and a two- or three-line CV.
6. Give the editor a realistic delivery date for copy and honour it.
7. Write simply and concisely, avoiding jargon and technical language, while keeping your sentences and paragraphs short.
8. Tailor the article to the style and readership of the magazine.
9. Expect to be paid for work accepted for publication in commercial magazines.
10. Use active voice and active verbs in your writing. Be yourself and try to have fun writing the article.

Adopt a conversational tone throughout your article. Pretend you're on an aeroplane on a transoceanic flight. The stranger sitting next to you asks what you do and you reply by telling her that you're a science writer (or scientist). As the conversation develops and she asks for more details about your profession, you realise she knows practically nothing about astronomy, but she's intelligent

and intellectually curious. Write the article as if you're talking to her.

A key to making your article conversational in tone is to use the active voice for 95 percent or more of your sentences. This is difficult for astronomers, since the scientific literature makes wanton use of the passive voice. But in popular articles, you should avoid the passive voice as you'd avoid sponge-bathing a diseased yak. In other words, say, "Astronomers discovered a new planet" rather than, "A new planet was discovered by astronomers".

Nothing makes writing come alive more than the use of active verbs (brandish, eviscerate, expunge, galvanise). If you are writing in English, avoid the various incarnations of "to be", the most boring verb in the language.

Keep most sentences short and avoid long run-on sentences. Read your words aloud. If your sentence sounds clunky, or like something nobody would ever say in conversation, rewrite it or break it apart into two or three shorter sentences.

Most magazines run their articles on two to four columns per page. Those columns are narrow, so long paragraphs look *really, really* long. A casual reader glancing at the page will be immediately turned off by the appearance of super-long paragraphs. So keep your paragraphs short, no longer than three or four sentences. If a paragraph goes over 150 words, considering breaking it up into two or more shorter paragraphs.

Avoid jargon as much as possible and minimise the use of needlessly complex terms. And when you must explain complex concepts, try to use analogies from everyday life. Here's an excellent example by science writer Christopher Wanjek in the November/December 2000 issue of *Mercury*:

To visualize frame dragging, imagine the bowling ball rotating with something sticky on it. The ball pulls at a sheet as it spins. A marble rolling on the sheet not only curves around the ball, it also gets pulled forward a bit. Likewise, with frame dragging, the region of space-time close to the neutron star feels a tug. Any photon or matter in the region gets pulled along for the ride.

As a reader, there are a couple of things that really annoy me and often stop me in my tracks. One is an article that leaves an important question unanswered or contains a statement that seems to contradict a statement made elsewhere in the article. Anticipate questions that will be at the back of readers' minds and either provide an answer or tell the reader that the answer is unknown. And make sure to resolve any seeming con-

traditions quickly. The last thing you want is for readers to stop reading your article in the middle because they have become frustrated or confused.

If you use quotes in the article, make sure they are punchy and succinct. Quotes are particularly compelling if they convey a person's heartfelt emotion. Do not use long quotes to explain a concept. It's usually better to put lengthy explanations into your own words.

Last but not least, spice things up with the occasional use of amazing facts ("a billion neutrinos passed through your left pinkie in the time it took you to read this sentence") and humour. Whether or not you agree with this statement by *Sky & Telescope* editor-in-chief Rick Fienberg from the November 2006 issue, I bet you'll at least get a chuckle:

We got a definition that reads like it came from bureaucrats, not scientists. And now we need a new mnemonic to remember the order of the eight remaining planets. Here's one that works for me: Many Very Egotistical Malcontents Just Screwed Up Nomenclature.

Most of all, be creative, be yourself and try to have fun writing the article. If you have fun writing it, the chances are good that your audience will enjoy reading it. Always remember that you are telling a story.

What to Expect

So let's assume you have finished your article and you e-mail it to an editor. What happens after that?

During my earlier tenure at *Sky & Telescope* and *Astronomy*, we would often hold editorial meetings to decide on one of three possible outcomes. Perhaps about 30 percent of the time we would agree that the manuscript was in such good shape that we could accept it for publication. The large majority of the time, perhaps 65 percent, we would ask the author to make revisions based on our suggestions. Very rarely, perhaps 5 percent of the time, we would conclude that the manuscript was in such poor shape either in terms of writing style or accuracy (or both) that we would reject it and allow the rights to revert back to the author. We would also pay the kill fee specified in the contract.

The key point here is that just because you've submitted your article it doesn't mean your job is finished. You might have to go through several rounds of iteration with your editor, and even if your article is accepted, you will probably have to answer questions. Writing an article and seeing it through to publication is a big job, so before committing to write an article, make sure you're willing to spend the time and energy to make it happen.

Some editors are more aggressive than others about changing the text. Expect to be edited and be prepared for significant revisions. Try not to take it personally, since an editor's first priority is to serve the magazine's readers, not the author.

Sky & Telescope's standard operating procedure is to share the edited version of articles with authors. But other magazines and editors have different policies. It's fine to ask up front if you can see the edited version, but there is no guarantee that the editor will abide by your request unless it's the magazine's standard policy.

Also, magazines usually have to make last-minute changes to an article's text to make sure it fits properly in the layout. Do not expect to see these changes. Magazine staffers work under tight deadlines, and they simply cannot allow authors to micromanage the production of an article, especially during the latter stages of the process.

Most editors will welcome suggestions about images and illustrations, but art decisions are made by the magazine's staff, not by authors. Do not expect to see the layout of your article until you receive the printed copies in your mailbox (and yes, you should request several complimentary copies of the issue). In addition, you can suggest titles, teasers and captions, but these things are generally written by editors, not by authors.

The bottom line is that it's reasonable to ask to see the first edited version of your article, but don't expect to have any control after that. At some level, you have to trust that the magazine's editorial and art staff are competent. If you're worried about being embarrassed in print, don't write for magazines, or be careful about your choice of magazines.

Even after 15 years and hundreds of articles, I still feel a rush of excitement and satisfaction upon seeing one of my articles in print. If you want to communicate astronomy at an in-depth level, but without making the enormous effort it takes to write a book, magazines are still open for business and they're always on the look-out for new ideas and new writers.

Biography

Robert Naeye of SP Systems is the senior science writer in the Astrophysics Science Division at NASA's Goddard Space Flight Center in Greenbelt, Maryland, USA. Besides his 15 years in the magazine business, he has authored two books and contributed to two others.