

## ISSUES & IDEAS

**buzz aldrin**

Buzz Aldrin was the second man to walk on the moon—a mere 19 minutes after the first. Thirty years later, he reflects on his achievement and offers a vision of the future.

# Forbes

By James M. Clash

**O**n July 20, 1969, Edwin (Buzz) Aldrin became the second man to step onto the lunar surface, 19 minutes behind Apollo 11 mission commander Neil Armstrong. Since then, Armstrong has retired to his farm in Lebanon, Ohio. But Aldrin, 69, who wrote a science fiction novel, *Encounter with Tiber*, in 1996, still reaches for the stars through his ShareSpace Foundation, a proposed lottery that would allow ordinary citizens a chance to go into space.

Aldrin is sorely disappointed with the rate of progress of manned space exploration in the last three decades. Whom and what does he blame? NASA's bureaucracy, for one. The end of the Cold War, for another. With the 30th anniversary of Aldrin's historic moon walk approaching, it seems a good time to talk to an American hero.

**Forbes Global: If you could return to outer space—as former astronaut and retired senator John Glenn did on the Shuttle last fall—would you?**

**Aldrin:** I think that those of us fortunate enough to participate in Apollo and fly to the moon had our share of rewards for the time we put in. To try to edge into another spaceflight on board the Shuttle is kind of incongruous. The Shuttle is an aerospace transport; it carries people and cargo. It's not an exploration command module or a lunar lander. It's not a pioneering vehicle.

**Should NASA start sending civilians into space again?**

There's essentially an understanding that only government employees will go since the *Challenger* exploded in 1986 killing the six astronauts and one

schoolteacher on board. Yes, it should revert back to where the operator of the Shuttle is able to take [ordinary] people. It's time that the billions of dollars in contributions from taxpayers result in taxpayers' being able to go into space. You don't have to be superhuman. If a 77-year-old, no matter how good condition he's in, can go into space, so can a 25-year-old.

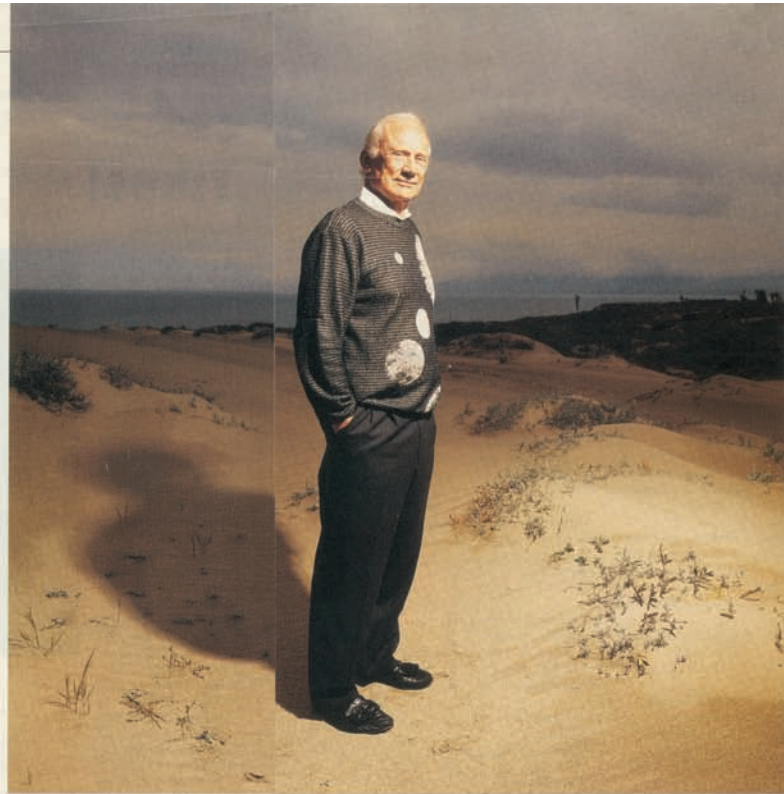
**How would ShareSpace fit in?**

Even the rosiest of forecasts predicts it will be a long time before the average price for a ticket into space is affordable to ordinary citizens. Is space tourism, despite its potential promise of space [travel] for all, destined to replace a well-trained NASA elite with a well-heeled economic elite? Not necessarily. There's a classic mechanism for ensuring that a high-priced asset is distributed in an egalitarian manner—the lottery. I'm proposing that for a nominal price of, say, \$10, ordinary citizens gain access to a space lottery. Prizes in the near future could include suborbital and orbital flights. There is no reason why later prizes could not include trips around the moon and Mars.

**Are you disappointed that we haven't sent a man to Mars yet?**

Over the years, I've kept abreast of the space program and realized that sending humans to Mars is not going to happen until the cost of rocket launches comes down. The best way for that to happen is [spacecraft] reusability. And that requires a high flight rate with valuable payloads. People fit into that category.

If you put people into space, you need at least to bring down the container that took them up, and if it's a two-stage rocket, we need to recover the larger



booster and reuse it, too.

An inspired political leader with the backing of Congress and corporations could get us behind a commitment that would take people to Mars within 20 years. Every five years we could accomplish something of significance. We could improve the Shuttle in five years. In ten years, we could begin to replace the Shuttle.

**Were you ever afraid, either in space or as a Korean War fighter pilot?**

There's always an interest in safety and dealing with something that goes

wrong. But for the high-visibility performer, the pilot, his reactions are so important—doing the right thing at the right time. Not making a mistake is more important than a fear of physical danger. A mind concerned about danger is a clouded mind. It's paralyzing.

**What do you remember about your lunar landing in 1969?**

Obviously, when we touched down, we were very relieved. Neil and I acknowledged that with a wink, a nod and a pat on the shoulder. The immediate surface was very powdery, as best we could see

looking down from five meters. Off in the distance was a very clear horizon, maybe with a boulder. And, of course, the brightness of the sunlit surface was almost like looking out at sunlit snow. Your pupils close down, just as in orbit when the sun is on the spacecraft. The sky is black as can be, but there's no way you can see stars. They're there, of course, but you can't make them out, because they're too faint with all the ambient light in your eyes.

Knowing that we were going to call ourselves Tranquility Base—but we had

**Buzz Aldrin**  
"We should be farther along in space travel."  
■

never rehearsed that because we didn't want people to know—we hadn't inserted that historic announce-

ment into our procedures checklist. So when Neil said ["This is Tranquility Base, the Eagle has landed"], it struck me as, "Gee, we're in the middle of something, Neil, don't do that."

**Any disappointment that Neil was to be the first to walk on the moon?**

No, not at all. I recognized when we, as a crew, were picked to be the first landing mission that there would be a great loss of privacy, a great burden of public speaking, which never appealed to me. If I were given a choice, there was something inside that said, "You might be better off, Buzz, on the second or third lunar landing, because you won't have as much of this. You will also get to do more things when you're on the moon. Maybe the burden of being on the first landing is something you'd just as soon not have to put up with—the quest for more and more glory." But the competitive nature of everybody was such that you weren't about to turn down something offered to you.

**Do you believe there is life in the universe other than on earth?**

I'm pretty careful with what I say I believe in. If you say you believe in something, you are beholden to defend it. Somebody has to be at the top. We're not bad, we're pretty advanced for a species. But somebody has to be leading the pack in this universe. And chances are that somebody else is.

**If there's anything you could say to NASA, what would it be?**

We've got government careers now that are based on the latest polls. This is the epitome of short-term thinking. You're asking somebody to vote on something, he has no responsibility for later. What's necessary is to look beyond the problems of the moment, to project where we'd like to be in 20 to 30 years. Mars should be within our grasp by then. A number of us feel that it's inevitable there will be a [permanent base] on Mars. And that within 500 years we will journey to the stars. It's inbred within us to do that. It's human curiosity. If we don't, we'll fall by the wayside. ■