

Moon Man: Buzz Aldrin's Advice on NASA's Orion Mission

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In 1969, Buzz Aldrin served as the lunar module pilot on Apollo 11. Now 77 (and a member of PM's advisory board), he offers his thoughts on the next mission to the moon. Click [here](#) for Buzz's roadmap to Mars.



(Photograph by Chris Buck/Corbis Outline.)

PM: If you were having a drink with astronauts planning to head for the moon in Orion, the new Crew Exploration Vehicle (CEV), what advice would you give them?

ALDRIN: I'd tell them to look out the window, have a good time and make sure you know what to do if something goes wrong. You have to prepare for contingencies.

PM: Like what?

ALDRIN: One problem might be loss of communication, in which case you'd have to do your own navigating. We took a manual sextant on Apollo, and I'd advise Orion astronauts to carry one, too. They also need to make sure they have a good procedure for a free-return trajectory [in which gravity would carry the spacecraft directly back to Earth].

PM: How about the lunar landing?

ALDRIN: You'd better have a full abort-to-orbit capability, plus rendezvous, like we did. And you need a contingency plan in case of docking problems on the return. If you can't dock, you'd have to do an extravehicular transfer. That's a pretty dicey affair, especially if the CEV is orbiting unmanned.

PM: One thing about Orion that will be different from Apollo is the skip re-entry required to land on U.S. soil.

ALDRIN: I'd be a little concerned about a skip re-entry. If something goes wrong and you land in water, is the Navy out there to pick you up?

PM: What's your take on NASA's plan for a permanent moon outpost?

ALDRIN: It's hard to see the pitfalls so far ahead, but I worry that once we establish a base on the moon, we might get bogged down there. The way I see it, commercial interests should manage a lunar base while NASA gets on with the really important task of flying to Mars.