## Apollo 16 and 17 Landing Sites

Go to Google Moon: http://www.google.com/moon/

Turn on the "Charts" button in the upper right corner.

Look at the geological maps of the landing sites of Apollo 16 and 17. (Map names: Theophilus and Marcrobius). The keys for the maps are on the right of the maps. Based on these map, describe in your own words the landing sites for the missions. Your description should include:

- 1. How the various landforms at the landing sites were formed.
- 2. What types of rocks you would expect to find at the landing sites.
- 3. How are they different from the landing site if the Earth Apollo missions (Ap 11,12 and 14)

Each description should be about 150 words long.

Due: Tue Feb 26 in class (-2% for every hour late)

Astronomy 190

Writing Assignment

WINTER 2008

On the back of the page is an editorial written for the *Chicago Sun-Times* at the end of the Apollo missions. Write a response to this editorial (either pro or con). Your response should be about 300 words long. Please site specific examples from class. Your audience is the current general public, not necessarily someone who know anything about the Apollo missions.

Due: Thursday March 13 in class (-2% for every hour late)

## END OF A CRAZY BUSINESS

HOUSTON - And now, thank God, the whole crazy business is over.

They splashed down safely Tuesday afternoon, these two test pilots and this geologist, and that night most everybody got home alive from the splashdown parties along the NASA strip. On Wednesday a handful of red-eyed worthies showed up late for work, complaining in a macho sort of way about their hangovers, as if it took intellect or manhood to be sick the following morning from having dulled the central nervous system with ethanol.

Taken all in all, it was a mighty small hangover for such a tremendous binge. For 11 years, 6 months and 24 days – John F. Kennedy's proclamation of men on the moon in the 60's to the splashdown of Apollo 17 – the United States was on a moon bender that cost \$25 billion in cash [\$112 billion in 2004 dollars] and an incalculable amount of emotional energy.

It started on May 25, 1961, born of Vostok 1 and the Bay of Pigs and the same kind of mindless machismo that makes a virtue out of the Katzenjammers. It ended on Dec. 19, 1972, with neither a bang or a whimper; actually, more of a ho-hum. The final Apollo flight, in many ways the most interesting and significant, was almost ignored; at least in comparison with earlier trips to the moon.

Because of budgetary considerations and a general lack of public interest, Apollos 18, 19 and 20 have been canceled, and one might say that this is a billion dollars or so well saved, except that there's no telling what other methods the government will devise to waste it. But one thing is certain: It won't be squandered on 'chiselers' and 'welfare bums' – or the sick and the hungry and the ignorant. In this fact, at least, the space hawks may take solace as they can find.

PROJECT APOLLO was billed as a triumph of the American spirit, but in reality is was a minority effort from start to finish. There was no place in it, for example, for women (who are the majority of Americans) except as nurses, secretaries, pussycats and gophers – gopher coffee, gopher pizza, you name it. Nor was there any place at the cutting edge, in the astronaut corps, for females or blacks or Chicanos or even Jews. The glamor end of the business was dominated by people who where male, white, Gentile and mostly WASP.

Nor was there any real place for youth. Most of the astronauts were in their mid-to-late '30s before they flew the first time, and when Alan Shepard visited the moon, he was 47.

The poor participated from the outside looking in – they paid taxes – and a sizable percentage who thought about Apollo at all believed it was just a TV show produced in Burbank or Arizona or somewhere – another trick perpetrated by the Man.

This isn't to say that no one benefited from Apollo. Anyone who owns IBM stock, for example, is way ahead of the game by virtue of our having placed men on the moon. A relative handful of scientists have advanced their careers and had a ball in the bargain; who wouldn't with a whole new world for his personal sandbox? In 3 1/2 years of studying lunar rocks they have refined their theories a bit about the origin of the moon – a neater fix, so to speak, on the number of angels who can dance on the point of a pin.

IN SHORT, the benefits have accrued to the few rather than the many. That's not what you've been hearing this week from NASA, but it's true. Project Apollo has not made the world a better place to live in, or life more worth living.

The late Max Born, who won the Nobel Prize for physics and should have won another for common sense, saw through the whole thing back in 1958, three years before the first man flew in space. He saw spaceflight for what it was ("a sport, and a terribly expensive sport") and told colleagues at a meeting in Germany:

"I do not believe for a moment that these words will be headed, but they must be spoken so that future generations, if there are future generations, do not think of this as a time of total madness. I can of a generation that still discriminated between intellect and reason. Intellect distinguishes the possible from the impossible, reason distinguishes the sensible from the senseless. Spaceflight is a triumph of intellect and a tragic failure of reason."

So it is to this day. Thank God the crazy Apollo business is over.