

EROS chief won't weep when Skylab bites dust

By RANDY MEDEMA

Argus-Leader Staff Writer

GARRETSON, S.D. — Allen Watkins won't be choking back any sentimental sobs when Skylab makes its fiery return to earth later this month.

In fact, working on the troubled Skylab may be one project the chief of EROS Data Center would rather forget.

"Working on Skylab was not one of the most pleasant experiences in my life," Watkins said. "Nothing ever worked right."

Watkins spent most of the 1960s working at Johnson Space Center in Houston, Texas, trying to get the space station off the drawing board and onto the launching pad.

His job was to design and construct all of the scientific experiments that were conducted on board the space lab.

From the beginning, Watkins recalls, the Skylab program was riddled with mishaps and malfunctions that threatened to scrape the entire project.

"Skylab was not NASA's forte," Watkins said. "It was not one of their better projects served up to the public."

So to Watkins, it's only fitting that America's first space station has as many problems coming down as it had going up.

In fact, Watkins is betting that NASA's predictions on when and where the jinxed space lab will fall will be wrong, just like everything else about the ill-fated program.

NASA is predicting that the 77-ton orbiting laboratory will leave the heavens sometime between July 9 and 16.

The space agency expects some 500 pieces of debris to scattered across the planet when the space lab slams into the earth's atmosphere.

NASA says the risk of being hit by a chunk of Skylab is minimal, and Watkins agrees.

But flight controllers following Skylab's path also acknowledge that they won't know when or where it will come down until shortly before it happens.

"It could come in backwards, sideways or upside down," Watkins said. "Without knowing which way it will come in, you can't tell what kind of drag (resistance in the atmosphere) it could have."

One of the larger pieces expected to fall to Mother Earth is a 4,000-pound lead vault used for film storage. You can blame Watkins.

"I argued quite strongly, along with my boss, to get the vault on board," Watkins said. He said the vault was necessary to protect sensitive film from prolonged exposure to cosmic rays.

Watkins well remembers the problems that plagued the Skylab project:

About a minute after the rocket carrying Skylab to its destination took off, a heat shield tore away and crippled the two solar panels that were supposed to power the space lab.

Without the heat shield to protect the space station from the sun, temperatures in the workshops soared to more than 130 degrees.

Until the experts figured out how to rig a substitute shield, the station was uninhabitable. That pushed back plans to send a second ship loaded with three astronauts to man the space lab.

When the first batch of crew members finally reached the lab, the docking mechanism wouldn't work. So the astronauts had to join the two ships manually.

Scientific observations of the sun, earth and cosmic rays were supposed to be made.

But "a lot of the experiments didn't work," Watkins said.

But despite the headaches, Skylab was useful not only for its experiments that worked but also for showing that engineers and astronauts could surmount unexpected hardships, Watkins said.

He said the space station definitely was worth the problems its re-entry is causing now.

"The likelihood of someone getting hit is astronomical," Watkins said.