Focus

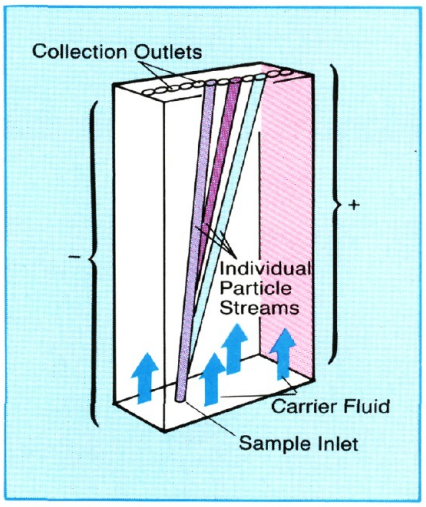

Figure 3. Continuous-flow electrophoresis
Adapted from company literature courtesy of McDonnell Douglas

channel of the electrophoretic separator.

If space shuttle testing continues to be successful, McDonnell Douglas plans to design and fabricate an EOS unit with 24 times the capacity of the single-chamber unit flying now. The larger unit is currently scheduled for an initial shuttle flight in 1985.

The company has benefited from a National Aeronautics and Space Administration (NASA) program, the Joint Endeavor Policy, that encourages private investment in space industrialization by offering free shuttle flight time during the R&D phase of a commercial venture. McDonnell Douglas will have to pay for shuttle flights once commercial operation begins.

Later still, perhaps in the late 1980s, the company plans to start full-scale production on an unmanned space platform orbiting in space. Such a plant, which could operate continuously for months at a time, would be serviced by shuttle crews, who would deliver raw materials and collect separated pharmaceuticals for return to Earth.

Business Week (Aug. 29, 1983, pp. 52–53) reports that Fairchild Industries plans a 1987 launch of "Leasecraft" platforms that could be rented out for research and manufacturing operations. McDonnell Douglas may buy time on an orbiting station from such a company, or it may decide to launch its own manufacturing station. Either way, the company expects the EOS operation to be generating a positive cash flow within a few years of production start-up.

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