

## Alaska Crime Scene Investigations



### Telemetry Device: Life History Transmitter

**Alias:** LHX tag

**Location:** Inside the body cavity of the Steller sea lion

**Color:** Pink and grey, it looks like a large capsule about the size of a soda can.

**Technology:** Archival Satellite Transmitter devices custom developed by Markus Horning in collaboration with Wildlife Computers specifically for research on the endangered Steller sea lion.

- Uses:** Surgically placed inside Steller sea lions to monitor individual sea lions throughout their entire lives, no matter where they go, until they die. The transmitter monitors temperature, light and surrounding medium to detect life or death. This information is used to determine how animal may have died.
- Satellite:** Connects with the ARGOS system aboard NOAA low-orbiting weather satellites. The ARGOS system offers worldwide tracking and environmental monitoring services.
- Size:** About 1 and a half inches in diameter and 5 inches in length
- Weight:** ¼ pound in air
- Batteries:** Two Lithium Thionyl-chloride primary cells, lifespan >10 years
- Transmitter:** ARGOS compatible UHF transmitter
- Internal memory:** 0.25 MB, non-volatile
- Sensors Detect:**
- Temperature
  - Light
  - Surrounding medium
  - Other specialized sensors
- Shell material:** Resin with micro-glass spheres
- Pressure rating:** Can withstand a 1,500m water-column depth