GOES-O Series Search and Rescue:

GOES is also part of the COSPAS-SARSAT search and rescue system. Emergency signals transmitted from aircraft, marine vessels, or individual emergency locator transmitters are relayed to a mission control center, from which rescue efforts can be dispatched. As of August 15, 2008, over 24,500 people have been rescued worldwide since 1982, of which 5,949 were in the United States.

Launch:

Launch Location: Cape Canaveral, FL
Launch Services: United Launch Alliance
Launch Vehicle: Boeing Delta IV
Launch Date: February 2009

GOES-O initial orbit target at rocket separation:
– Orbit apogee altitude* 35,177 km (21,858 mi)
– Orbit perigee altitude* 6,623 km (4,115 mi)
– Inclination 12.0 deg

The spacecraft then performs a series of maneuvers to finally achieve a geosynchronous orbit at 35,780 km (22,233 mi) above Earth’s surface.

* Based on a 6,378-km (3,963-mi) Earth radius

Spacecraft Definitions:

EPS: Energetic Particle Sensor
EUV: Extreme Ultraviolet
GOES: Geostationary Operational Environmental Satellite
SEM: Space Environment Monitor
SXI: Solar X-ray Imager
XRS: (Solar) X-ray Sensor

NOAA and NASA Partnership:

NASA’s Goddard Space Flight Center procures, develops, tests, and delivers the GOES to orbit. NOAA’s National Environmental Satellite, Data, and Information Service (NESDIS) manages, funds, and operates the GOES. NOAA is also responsible for processing, analyzing, disseminating, and archiving all operational data, which is available to government researchers and others for research and environmental applications.

www.osd.noaa.gov/GOES/goes_o.htm  www.noaa.gov  goespoes.gsfc.nasa.gov/goes