space shuttle Discovery turned night
into day along Florida's east coast with
a launch at one minute before midnight
on August twenty-eighth the spectacular
liftoff began discoveries 37th mission
two days after launch commander Rick
sturckow carefully guided the 100-ton
space shuttle towards successful
rendezvous and docking with the 350-ton
space station as they orbited 225 miles
above earth with three spacewalks on the
agenda during their eight days of docked
operations the crews of shuttle and
station got down to work with supply and
equipment transfers that would stretch throughout the mission in addition to supplies and research facilities the flight delivered a new crew member to the International Space Station tim kopra ended his time onboard the space station swapping places with nicole stott who joined the six-member expedition 20 crew the crew used the station's robotic arm to move the Leonardo multi-purpose Logistics Module from Discovery's payload Bay to the earth-facing port on the station's harmony node from there they unloaded
NASA Kennedy - STS-128 Mission Overview

15,000 pounds of cargo from the module

Danny Olivas and Nicole Stott spent about six and a half hours performing the missions first spacewalk replacing an empty ammonia tank assembly and retrieving to science experiments inside the station newly delivered crew and science equipment was installed on the missions second spacewalk it took aleve Christer Fugelsang about six and a half hours to install the new ammonia tank on the station and stow the depleted 1295 pound tank in the shuttles payload bay
the new tank provided 600 pounds of
fresh ammonia to circulate through the
station's port cooling system alibris
and Fugelsang also were paired for the
mission third and final spacewalk during
the seven hour session they deployed a
payload attachment system on the
station's trust
replaced a rate gyro assembly a power
control module and to GPS antennas using
the station's robotic arm the crew
returned the Logistics Module to
discoveries payload Bay before the two
crews parted and the shuttle undock from
the station a weather delay kept
58
00:02:25,289 --> 00:02:29,579
discovery and crew in space and extra

day and also prevented them from a

began at Kennedy Space Center instead

the shuttle touched down safely at

edwards air force base in california on

sep tember 11th ending a successful

14-day mission