



**US Army Corps
Of Engineers®
Jacksonville District**

Canaveral Lock

Fact Sheet



Canaveral Lock
Port Canaveral, FL

Welcome to Canaveral Lock, the largest navigation lock in Florida. Located between Port Canaveral's West turning basin and the Banana River, Canaveral Lock was constructed by the US Army Corps of Engineers in 1965 to secure safe passage of vessels from the Banana River to Port Canaveral and the Atlantic Ocean. The lock reduces tidal-current velocities in Canaveral Harbor, prevents entry of hurricane tides into the Banana River, and prevents salt water intrusion. This lock was built larger than originally planned (600' X 90' X 14') to allow passage of the Saturn rocket's first stage, used to put Apollo rockets into space.

Canaveral Facts:

- Location of Canaveral Harbor: 145 miles south of Jacksonville and 70 miles north of Fort Pierce
- Canaveral Harbor history: Created in 1951 by an artificial cut through the barrier beach to provide access to a turning basin in the Banana River, jetties completed in 1954
- Lift of lock: Varies by tide stage in Canaveral Harbor and water level in the Banana River. Normal maximum difference in water levels is 3 to 4 feet.
- How water level is changed: By releasing water from the ocean side to the Banana River side or vice versa
- Lock staff: Five Corps of Engineers personnel
- Major commodities through lock: Petroleum, NASA Shuttle booster rockets, commercial fishing vessels
- Lock usage: Any vessel with draft up to 12 feet, no charge for lockage. Lock operating hours 6:00 am to 9:30 pm (Observation area 6:00 am to 9:00pm), 365 days a year. Lockage takes 20 to 30 minutes.
- Lock cost: \$5.6 million total (includes bridges, roads, barge canal enlargement), cost of lock \$2.96 million



Technical Details

- Gate type: Sector gate (pie-slice shape), similar to gates on the Okeechobee Waterway
- Gate size: 23 feet high, 54 feet wide, 54 feet across the end
- Gate weight: 47 tons (similar to the weight of 40 cars)
- Lock chamber type: Earth walls, stone bottom, stone riprap on walls
- Water seal type: Rubber cushion
- Gate skin plate thickness: 3/8 inch
- Concrete in gate monoliths: 15,000 cubic yards
- Concrete slab thickness at bottom of gate: 10 feet, widest point between gates is 184 feet

