

# Immerse Yourself in the Story of the Panama Canal Construction event of the century.



Admirers poured into the locks for a close-up look.



Not until the 1930s, when Boulder Dam was built, would any concrete structure equal the locks' total volume.

*The Panama Canal was a romantic tourist destination even before its opening. Reporters, photojournalists, adventurers and the curious came from around the world. What they found was almost too big for words. One early reporter wired, "This canal is both a first and a last... man will never again build with such scope, such imagination."*

#### EARLY EFFORTS

As early as the days of Columbus, man was set on finding a sea-level shortcut through the Americas landmass. But not until Frenchman Ferdinand de Lesseps, fresh from his triumph of building the Suez Canal in 1879, did anyone make a serious attempt. Long story short: The project was poorly managed, underfinanced, and in 1889 the French company went bankrupt. Clearly, an engineering project of this magnitude was too much for a private company. This was a job for a nation.

#### ENTER THE UNITED STATES

In 1902 President Theodore Roosevelt revived the dream. The United States purchased the French holdings in Panama. Colonel George Washington Goethals of the U.S. Army Corps of Engineers was put in charge. And the construction of the Canal proceeded with unprecedented speed.

#### AGAINST ALL ODDS

Despite malaria and 130°F days, the work went on. One foot at a time across fifty miles of jungle, laborers dug an enormous trench, dammed rivers and constructed six immense locks. On August 15, 1914, the steamer *ss Ancon* made the 50-mile inaugural transit in nine hours and 40 minutes — shaving some 9,000 miles from the usual trip around Cape Horn.



Theodore Roosevelt believed a canal was indispensable to U.S. supremacy at sea, which was secured by the trial lockage in 1913.

**A COLOSSAL UNDERTAKING**  
"Everything is on a colossal scale," marveled a journalist for *Scientific American*. Locks with walls 1,000 feet long! Gates seven feet thick! And most amazing: Everything still works perfectly after nearly 100 years of constant operation.

**ON TIME, UNDER BUDGET**  
In 1913, a full year ahead of schedule and under budget by almost \$23 million, the Panama Canal was completed. The first vessel, the tugboat *Gatun*, tested the locks on September 16, 1913, and the Canal was officially opened on August 15, 1914.

**NO BETTER WAY**  
Even with today's technology, the work of building the Panama Canal could not proceed any faster. No modern system could possibly carry all that dirt more efficiently than did the trusty railroad employed nearly 100 years ago.

**THE DIRT ON THE CANAL**  
The most impressive aspect of the Canal just isn't there anymore — the dirt! 152.9 million cubic meters of material were removed, enough to fill railroad flatcars that, placed end-to-end, would circle the globe four times.

# Bridge between Worlds

More than just a Big Ditch.



Mexico



Panama Canal



*Excavating the Canal was equivalent to digging a trench 10 feet deep by 55 feet wide from California to New York! But as many a civil engineer will tell you, the Panama Canal is more than just a big ditch through the Isthmus of Panama. It is an ingenious system of locks that lifts giant ships from sea level up to a lake nearly 85 feet above sea level, then gently lowers them again. The Canal is really a bridge of water. And that's its brilliance.*

#### BRIDGING THE DIVIDE

- Among the many obstacles: the Continental Divide, looming 534 feet above sea level at Gold Hill. You'll cross it at an elevation of 85 feet via the winding, eight-mile Gaillard Cut— the Big Ditch!

#### DAMMING THE RIVER

- To provide the perpetual water supply necessary to operate the locks, an earthen dam was built across the Chagres River, creating Gatun Lake, at the time the world's largest artificial lake.

#### FROM PACIFIC TO ATLANTIC

- The Miraflores and Pedro Miguel locks raise your ship to 85 feet above sea level (54 and 31 feet respectively) to cruise Gaillard Cut and the serene expanses of Gatun Lake.
- On the other side of Gatun Lake, the massive Gatun Locks lower ships in three steps, about 28 feet at a time, back to sea level. Miraculous!

#### BATTERIES INCLUDED

What powers the locks? Nothing more than the force of gravity and 52 million gallons of fresh water surging in from Gatun Lake. (Salt water would have been exorbitantly expensive to pump in and would have corroded the lock mechanisms and destroyed vegetation.)

#### SIDEWAYS

The Isthmus of Panama stretches sideways from northwest to southeast, so you will actually exit the Canal on the Pacific side, 25 miles east from where you entered on the Atlantic side.

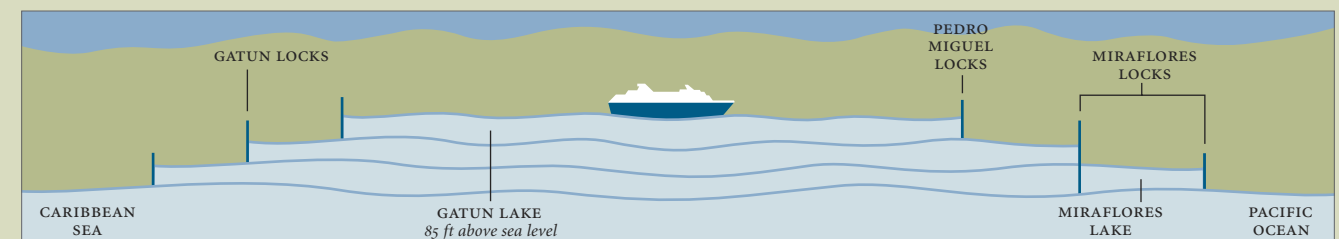
#### WEIGHING IN

Go ahead, have another hand-dipped chocolate. Your Holland America ship was weighed and measured at christening, and the Purser has already cut the check for our passage. About \$2.90 per ton. You do the math.

#### A GOOD READ

Hungry for more information? Nothing will better prepare you for your Panama Canal cruise than David McCullough's award-winning epic, *The Path Between the Seas*.

Panama Canal Elevation



Brilliant Caribbean islands, including our own private paradise, warm you up for a day in the Panama Canal, where you'll marvel at the wondrous workings of the massive Gatun Locks and the serene expanses of Gatun Lake. Tonight in Colón enjoy a festive deck party before sailing back to the Caribbean for explorations in eco-rich Costa Rica. All in 10 sights-filled days from Ft. Lauderdale or 13 days from New York City.

**PANAMA PERSPECTIVES**  
 Kayak island-dotted Gatun Lake, ride the historic Panama Railway along its jungle-clad shores.

**LOCKS AND BAGELS**  
 Rise early and enjoy breakfast on your private verandah as you transit the massive Gatun Locks.



## 10- or 13-Day Sunfarer®

### 10-Day Southern Caribbean & Panama Canal Sunfarer®

Roundtrip Ft. Lauderdale 10 days from us\$1,199

**2007 SAILING DATES**  
*ms Volendam:* Jan 2, 12, 22; Mar 3, 13, 23;  
 Apr 2, 12; Oct 24;  
 Nov 3, 13, 23; Dec 3, 13

| DAY | PORT                                | ARRIVE  | DEPART  |
|-----|-------------------------------------|---------|---------|
| 0   | FT. LAUDERDALE, FLORIDA             |         | 5:00pm  |
| 1   | Half Moon Cay, Bahamas✦             | 8:00am  | 3:00pm  |
| 2   | At sea                              |         |         |
| 3   | Oranjestad, Aruba                   | Noon    | 11:00pm |
| 4   | Willemstad, Curaçao                 | 7:00am  | 6:00pm  |
| 5   | At sea                              |         |         |
| 6   | Enter Panama Canal at Cristóbal     | 5:00am  |         |
|     | Cruise Panama Canal/Gatun Lake      | 7:00am  | 9:00am  |
|     | Gatun Lake*                         | 9:00am  | 10:00am |
|     | Cruise Gatun Lake/Panama Canal      | 10:00am | 1:00pm  |
|     | Leave Panama Canal at Cristóbal     |         | 1:00pm  |
|     | Cruise Limón Bay/Manzanillo Bay     |         |         |
|     | Colón, Panama                       | 3:00pm  | 7:00pm  |
| 7   | Puerto Limón (San José), Costa Rica | 6:00am  | 4:00pm  |
| 8-9 | At sea                              |         |         |
| 10  | FT. LAUDERDALE, FLORIDA             | 7:00am  |         |

✦ Conditions permitting.  
 \* Service call for shore excursions.



ONSHORE ADVENTURES, ONLINE  
 Reserve your favorite shore excursions in advance at [www.hollandamerica.com](http://www.hollandamerica.com) and receive priority processing. See page 39 for details.