

June 16, 2003

**MR'S ADVISORY TO SHIPPING No. A-16-2003**

**TO : All Steamship Agents, Owners, and Operators**

**SUBJECT: Monthly Canal Operations Summary – MAY 2003**

1. Statistical Summary:

- a. Transit Pilot Force ..... 279
- b. Pilots in Training ..... 0
- c. Tugs ..... 24
- d. Locomotives ..... 100
- e. Traffic Statistics (Preliminary):

	<u>Average Daily</u>	<u>High Daily</u>	<u>Low Daily</u>
Arrivals	32.4	42.0	21.0
Oceangoing Transits	32.6	39.0	20.0
Canal Waters Time (Hrs.)	19.56	25.78	13.00
In-Transit Time (Hrs.)	9.52	12.10	6.87
	<u>Total</u>	<u>Supers</u>	<u>Regulars</u>
Booked Transits	438	277	161

2. Scheduled Locks Outages

<b>TENTATIVE SCHEDULE OF LOCKS OUTAGES FOR FISCAL YEAR 2003</b>						
<b>Dates</b>	<b>No. of Days</b>	<b>Miraflores</b>	<b>Pedro Miguel</b>	<b>Gatun</b>	<b>Daily Transit Capacity</b>	<b>Status</b>
Jul 7 - 17, 2003	11	Lane Outage			30 – 32	Confirmed
Aug 11 - 22, 2003	12		Lane Outage		30 – 32	Tentative
Sept 15 - 25, 2003	11	Lane Outage		Lane Outage	26 – 28	Tentative

**Note:** Whenever a set of locks requires a major outage of one of its two lanes for dry chamber inspection, miter gate repairs, tow track work or other major maintenance/improvement projects, advantage may be taken of this requirement to perform simultaneous single lane outages for additional maintenance at other locks.

**Transit Capacity:** The normal capacity of the Panama Canal is 38 vessel transits per day. This capacity is reduced during locks outages, as indicated in the above table. Consequently, vessels may experience delays in transiting. Normally, during these periods, the Panama Canal Vessel Transit Reservation System slots are fully utilized. Two-day lane outages have no significant impact on Canal vessel backlog.

- 3. See reverse for items of interest to the shipping community.
- 4. This advisory will be canceled for record purposes on June 30, 2003.

**ORIGINAL SIGNED**

Jorge L. Quijano  
Maritime Operations Director



## ITEMS OF INTEREST FOR THE SHIPPING COMMUNITY

### CANAL PERFORMANCE

In May 2003, oceangoing transits totaled 1011, or a daily average of 32.6. Transits by wide-beam vessels (30.48 meters/100 feet in beam and over) totaled 398, or 39.1 percent of all oceangoing transits. The average Canal Waters Time (CWT) was 19.56 hours.

### AIS SYSTEM: MORE EFFICIENCY AND SAFETY FOR THE CANAL

The Panama Canal Authority (ACP) announced that in order to reduce delays, improve and increase safety and security, and maximize the logistics management of each transit, effective July 1, 2003 all vessels over 300 net tons or measuring more than 20 meters in beam that transit Canal waters must be equipped with the Automatic Identification System (AIS), in compliance with requirements established by the International Maritime Organization (IMO).

Whenever vessels transit under tow, only towboats will be required to comply with AIS.

In compliance with amendments made to Chapter 5 of the Safety of Life at Sea Convention (SOLAS) last December, all vessels worldwide are obligated to carry the AIS at the time of the first safety equipment inspection, to be conducted between July 1 and December 31, 2004.

During the above-mentioned period, the Panama Canal Authority will provide vessels with portable AIS units for a nominal rental fee of \$150 as a temporary initiative for those vessels that need to transit through Canal waters, but lack the system.

### In the past

The desire to improve pilot visibility using the best technology available has been of permanent interest to the Panama Canal.

For instance, in 1974 it was considered installing a radar station system along the waterway; whose signal would be transmitted to Canal pilots via television during the transits. However, the system lacked the required accuracy to prove truly useful, and therefore the idea did not prosper.

After the launching of the first experimental satellite for the Global Positioning System (GPS) in 1978, which establishes the location of a piece of equipment anywhere in the world, the idea of implementing this system to aid navigation at the Panama Canal was born. The launching of the tenth experimental GPS satellite in 1988 concluded the experimental phase of the GPS, which proved the viability of using this system for navigation.

In 1991, During Operation Dessert Storm, this global positioning system was used for the first time with extraordinary results in precision, although not all satellites had been launched. Since then, small satellite global positioning receptors started being produced and their cost has decreased. The uses of the GPS multiplied.

In 1992, the International Telecommunications Union published a technical specification of a new vessel communications system known as *Digital Selective Call*, or DSC. This equipment incorporates a GPS receptor and allows transmitting, via radio, the vessel's position and other data by only pressing a button. The U.S. immediately started to require tankers navigating through Prince William Sound, Alaska, to carry DSC equipment on board to automatically report their position to a control center.

In 1994, GPS satellite number 24 was launched to complete the orbit, which provided accuracy and dependability to the positioning system. In 1996, the former Panama Canal Commission hired the VOLPE Center, a research branch of the U.S. Ministry of Transportation, to design a global positioning system that could be used at the Panama Canal. The construction of the system, known as Communications Tracking and Navigation, or CTAN, was a joint effort between the Panama Canal and the U.S. Ministry of Transportation. In January 2000, the CTAN was implemented in the waterway with excellent results.

Likewise, several administrations began experimenting with their own vessel tracking systems, which work similarly to the CTAN, but were incompatible among them. The International Maritime Organization (IMO) has supported the use of this type of system, and has developed a standard for tracking equipment that could be used worldwide. The resulting standard system is the AIS.

The ACP has incorporated in its current tracking system the capability to receive the new AIS signals that vessels will send. This means that vessels carrying AIS will no longer require carrying the case with the CTAN system, but just the portable computer. The AIS system, as conceived by the IMO, requires a data port on the bridge where pilots can connect the portable computer and activate the regular screen used today at the Canal.

According to Jorge Quijano, director of ACP Maritime Operations, experience has demonstrated that the incorporation of the latest available technology to the maritime industry has produced growing benefits to the sector.

To this regard, Quijano added that the Panama Canal Authority has actively participated in initiatives promoted by the IMO to improve the safety and efficiency of maritime navigation. In fact, it has remained ahead of the AIS issue, by initiating testing the system in May 2002. "We will be one of the first nations in the world to implement the system. Last week we began tracking vessels with the AIS as they passed near Punta Mala on their approach to the Panama Canal."