

FERRY OPERATIONS WORK GROUP

From: John Davey, Work Group Chair

Subject: Work Group Recommendation on Routes and Ferry Building Approach Zone

Date: May 8, 2008

Background

Small commercial passenger vessels operate year round on San Francisco Bay, San Pablo Bay and tributaries, in 2007 carrying five million passengers on nearly 73,000 transits. In total, passenger vessels make up more than 58 percent of all transits tracked by the USCG Vessel Traffic Service.

Currently, commuter service on six routes is provided by three ferry operators that regularly serve a dozen ferry terminals in the Bay Area. High speed ferries (more than 30 knots) currently operate on the Vallejo and Larkspur routes. The Water Transit Authority (WTA) is currently planning to add up to six new commuter routes to the region within the next few years.

While ferries have been one of the safest forms of public transportation, the planned increase in number of routes prompted concern of increased risk of collision. The Ferry Operations Work Group was assigned the task to develop and forward recommendations to the HSC designed to promote safe navigation of commute ferries.

Planning Process

To avoid future possible collisions of ferries, the Bay Area's three commute ferry companies/agencies agreed to work with the Harbor Safety Committee, Coast Guard Vessel Traffic Service (VTS), the WTA and interested parties to develop a protocol for ferry navigation in the San Francisco and San Pablo Bays. The group held more than a dozen meetings, including outreach to tug captains.

Beginning in 2006, the Ferry Operations Work Group reviewed a ferry routing model developed by George Washington University to identify risks associated with proposed increased ferry traffic. This model provided data that confirmed the protocols would increase vessel predictability for the ferry captains and VTS, which reduced the risk of collision.

From this information routes and waypoints were developed, and the Work Group and ferry captains tested the protocols using simulator training at the Army's small vessel training facility on Mare Island.

Because the ferries use a common electronic chart program, an overlay of the routes and waypoints was produced to familiarize and assist ferry captains with the route protocols.

Outreach

- San Francisco Bar Pilots provided input on routes and communications.
- Presentations of the route protocols by the VTS were given to the HSC and the WTA technical advisory committee.

Trial Period

Test use of the proposed routes commenced November 2006 and continued through 2007 to allow the Work Group to assess the routes and to incorporate suggested modifications. The work group met a number of times in 2006 and 2007 with ferry operators and captains to discuss lessons learned and to receive input on refining routes. Following the trial period, the ferry companies agreed upon the routing in the Central Bay and the area around the San Francisco Ferry Building.

Proposed Ferry Routing

The proposed routes and Ferry Building Approach Zone are shown in Figures 1-7, attached, and are incorporated herein. Diagrams are screen print files from vector-based electronic nautical charts (ENCs). Additional lines and labels were added to the screen print files for emphasis and clarity. For more information contact:

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Benefits

If the protocols are approved by the Harbor Safety Committee, future VTS outreach programs to waterway users will include ferry protocol information. The National Ocean and Atmospheric Administration (NOAA) has also agreed to include information about the ferry protocols on nautical charts and in publications. Including ferry routes in the Central Bay on NOAA charts will alert the maritime community and recreational boaters in particular that fast ferries use this area. A Maneuvering Zone at the Ferry Building will alert recreational boaters of the high frequency of inbound and outbound ferries.

Establishing the routes also lends predictability for VTS tracking: when ferries deviate from a route, there may be a need to advise the ferry captain of possible unsafe movements.

Future Ferry Operations Work Group Actions

- The Work Group will develop Best Practices as guidelines for ferry transit in inclement weather, to be adopted by the HSC and incorporated in the Harbor Safety Plan.
- The Work Group will work with Bay Area ferry operators to define a Maneuvering Zone for the waterfront adjacent the San Francisco Ferry Building and to develop approach and departure protocols for this area.
- The Work Group will work with NOAA to ensure the ferry routes and special zones are accurately reflected on navigational charts for San Francisco Bay.

Recommendations to the Harbor Safety Committee:

1. The Ferry Operations Work Group recommends that the ferry routes developed by the Work Group working with ferry operators, captains and the VTS, be adopted by the Harbor Safety Committee and incorporated into the Harbor Safety Plan.
2. The Work Group further recommends the HSC work with NOAA to include the routes and accompanying notes on area nautical charts.