Coordination of Communications for Union Pacific Railroad Bridge Lift Operations (the "Communications Protocol")

Introduction

Purpose	The purpose of this document is to outline the communications pr related to ships transiting through the Union Pacific Railroad Brid	
Example communication	In this document you will find examples of communications (<i>in it</i> . These examples show what typical communications might sound	
In this document	In this document the following topics are discussed.	
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Regulation	Refer to 33 CFR 117 – Drawbridge Operating Regulations regulations pertaining to drawbridge operations.	for rules and
References	This document is based on extensive input from Union Pacific Ra San Francisco, the San Francisco Bar Pilots, AMTRAK, and the C Corridor Joint Powers Commission.	
	Please direct all inquiries about this document to the following: Scott Humphrey E-mail: <u>shumphrey@d11.uscg.mil</u>	

Section 1 — Routine Communications

Basic instructions

When to call

This communications protocol is based on the vessel establishing initial contact with the bridge when the vessel is at the following locations.

Vessel is	Establish first communications
Transiting eastbound	When the vessel is underneath the Carquinez Bridge
	and prior to the Position report to VTS.
Transiting westbound	When the vessel is between New York Point and
	Naval Weapons Station Pier 3. Call no later than
	NWS and prior to the Position report to VTS.
Moored between the	As soon as possible after making the Sailing Plan
Carquinez Bridge and	report to VTS.
New York Point	

Key phrases In order for the communications protocol to be successful both parties must make every effort to communicate in accordance with the example communications provided herein.

These key phrases are intended to aid in avoiding confusion with respect to when a lift is required.

VTS's role VTS's primary role with respect to this communications protocol is to monitor communications. If key phrases are not used either party (rail or bridge) may be prompted by VTS to repeat communications.

Whenever confused as to the intended meaning of communication VTS may intervene.

Note: Either party (rail or bridge) may request the other to repeat communications whenever key phrases are not used or meaning is unclear.

Call signs The following radio call signs apply

Station	Call sign
Ship	Pilot unit designator: "Unit Tango"
Rail	"Union Pacific Railroad Bridge" or "UP Bridge"
VTS	"San Francisco Traffic" or "Traffic"

Advance call procedures

Procedure

Perform the following steps to advise the bridge of an expected lift request call.

Note: Where there are superscript numbers, refer to the explanations in Appendix A.

Who	Part	Syntax
Ship to Rail	NOTICE	This is Unit [unit designator] aboard the [ship name]
		at [location] making an ADVANCE CALL. I
		will call you at $1_{[time]}$ to request a full lift.
Rail to Ship	REPEAT & ACK	Understand Unit [unit designator] is making an
		ADVANCE CALL and will call at [time] to
		request a full lift.

During the above communications the rail will assess the situation and will be prepared to present Option 1 or Option 2 (below). If necessary rail should tell the ship to <u>"stand by"</u> to allow extra time for situational assessment.

Option 1—If no trains are expected...

-	A	
Rail to Ship	AFFIRM	² Standing by for your call.
Ship to Rail	VERIFY & END	That is correct. Out.

Option 2—If a train might conflict with the lift request time...

Rail to ShipPROPOSEThere is a [passenger/freight] ³ train scheduled over the bridge. Can you delay your request for a lift until [time]?Ship to RailANSWERa) Affirmative. Unit [unit designator] will delay request for a full lift until [new time].Ship to RailANSWERb) Negative. Unit [unit designator] is not able to delay request for a full lift.Rail to ShipREPEAT & ACKUnderstand that Unit [unit designator] is able / not able to delay lift request and will call at [time] to request a full lift.Rail to ShipAFFIRM ² Standing by for your call.Ship to RailVERIFY & ENDThat is correct. Out.		-	
Rail to ShipREPEAT & ACKImage: Constraint of the c	Rail to Ship	PROPOSE	There is a [passenger / freight] ³ train scheduled
Ship to RailANSWERa)Affirmative. Unit [unit designator] will delay request for a full lift until [new time]. OrOrb)Negative. Unit [unit designator] is not able to delay request for a full lift.Rail to ShipREPEAT & ACKUnderstand that Unit [unit designator] is able / not able to delay lift request and will call at [time] to request a full lift.Rail to ShipAFFIRM2 Standing by for your call.			over the bridge. Can you delay your
Ship to Runa) Affirmative. Onth [unit designator] with delay request for a full lift until [new time].Or0b) Negative. Unit [unit designator] is not able to delay request for a full lift.Rail to ShipREPEAT & ACKRail to ShipAFFIRMVariable to delay lift request and will call at [time] to request a full lift.Rail to ShipAFFIRM2 Standing by for your call.			request for a lift until [time]?
Image: Constraint of the constraint	Ship to Rail	ANSWER	a) Affirmative. Unit [unit designator] will delay
b) Negative. Unit [unit designator] is not able to delay request for a full lift.Rail to ShipREPEAT & ACKUnderstand that Unit [unit designator] is able / not able to delay lift request and will call at [time] to request a full lift.Rail to ShipAFFIRM2 Standing by for your call.			request for a full lift until [new time].
delay request for a full lift.Rail to ShipREPEAT & ACKUnderstand that Unit [unit designator] is able / not able to delay lift request and will call at [time] to request a full lift.Rail to ShipAFFIRM2 Standing by for your call.			or
Rail to ShipREPEAT & ACKUnderstand that Unit [unit designator] is able / not able to delay lift request and will call at [time] to request a full lift.Rail to ShipAFFIRM2 Standing by for your call.			b) Negative. Unit [unit designator] is not able to
Num to ShipOnderstand that Only [unit designator] is <u>able /</u> <u>not able</u> to delay lift request and will call at [time] to request a full lift.Rail to ShipAFFIRM ² Standing by for your call.			delay request for a full lift.
at [time] to request a full lift. Rail to Ship AFFIRM ² Standing by for your call.	Rail to Ship	REPEAT & ACK	Understand that Unit [unit designator] is <u>able /</u>
Rail to Ship AFFIRM ² Standing by for your call.			not able to delay lift request and will call
			at [time] to request a full lift.
Ship to RailVERIFY & ENDThat is correct. Out.	Rail to Ship	AFFIRM	² Standing by for your call.
	Ship to Rail	VERIFY & END	That is correct. Out.

IMPORTANT: If the bridge or the ship experiences problems which may impact the lift time the party experiencing the problem shall notify the other immediately.

Requesting a lift procedures

Procedure

Perform the following steps when requesting a lift.

Note: Where there are superscript numbers, refer to the explanations in Appendix A.

Who	Part	Syntax
Ship to Rail	REQUEST	This is Unit [unit designator] aboard the [ship name]
		at [location] ⁴ making a LIFT REQUEST.
		Request a full lift now.
Rail to Ship	REPEAT & ACK	Understand Unit [unit designator] is making a
		LIFT REQUEST for a full lift now.
Ship to Rail	VERIFY	That is correct.
Rail to Ship	INFO	1. LIFTING NOW: The lift has started.
		or
		2. ROUTINE DELAY: There is a [passenger/
		freight] train moving through the
		block. Lift will start at
		<i>approximately</i> [time].
		or
		3. MAJOR DELAY: I cannot lift the
		<i>bridge due to</i> [briefly describe].
Ship to Rail	REPEAT & ACK	Understand [repeat information from bridge].
Rail to Ship	VERIFY & END	That is correct. Out.

When the bridge is at a full lift.

Rail to Ship	INFO	You have a full lift.
Ship to Rail	REPEAT & ACK	Understand I have a full lift.
Rail to Ship	VERIFY & END	That is correct. Out.

Canceling request for a lift

Procedure

Perform the following steps when canceling a request for a lift.

Note: Where there are superscript numbers, refer to the explanations in Appendix A.

Who	Part	Syntax
Ship to Rail	CANCEL	This is Unit [unit designator] aboard the [ship name]
		at [location] canceling the lift request. ⁵ No
		bridge lift is required.
Rail to Ship	REPEAT & ACK	Understand Unit [unit designator] is canceling
		the lift request. No bridge lift is required.
Ship to Rail	VERIFY & END	That is correct. Out.

Keeping the ship informed

If the vessel's decision to cancel the lift request is based on information reported by the rail (e.g., mechanical problems with the bridge, train stuck on the bridge, etc.), the rail should keep the ship advised of current conditions. As soon as the problem is corrected and the bridge is able to lift, the ship should be notified.

Channel 16

However...

facts

Section 2 — **Emergency Communications**

Basic instructions

Purpose of the reports	A <u>"danger imminent" report from a vessel</u> prepares the bridge to take immediate steps to mitigate damage or injury.		
	A <u>"danger imminent" report from the bridge</u> warns nearby vessels to take immediate action to avoid approaching the bridge.		
Reporting priorities	An <u>"initial damage assessment report"</u> provides critical post-accident damage control information. This report contains only that information which must be acted on ASAP to forestall harm or prompt immediate rescue or pollution response.		
	Priority Radio What To Do Channel		
	1 st 13 Warn the affected parties using the emergency communication procedure.		
	2^{nd} 14 Report the emergency to VTS San Francisco.		

Channel 16 is the international maritime calling and distress channel.

Onlookers may report an emergency to the Coast Guard on channel 16.

• In the San Francisco Bay Region vessels participating with VTS are

not required to monitor channel 16.The UPRRB never monitors channel 16.

Emergency communications procedures

Emergency	When giving a radio alert of an emergency concerning the Union Pacific
alert radio	Railroad Bridge (UPRRB) or a ship approaching or transiting through the
signal	UPRRB, the word " <i>Emergency</i> " should be stated three times in succession on VHF FM Channel 13 as in the procedure below.

Procedure Following are the emergency communication procedures.

Who	Part	Acton and syntax
Ship to Rail or Rail to Ship	WHISTLE ALERT	Five or more rapid blasts of the whistle.
Ship to Rail or Rail to Ship	INITIAL CALL	State: [ship/rail call sign] <i>this is</i> [station reporting the emergency].
Ship to Rail or Rail to Ship	RADIO ALERT	State: <i>Emergency, Emergency, Emergency</i> .
Ship to Rail or Rail to Ship	INFORMATION	 Report the nature of the emergency. Examples: Imminent collision with the bridge. Obstructions hanging from bridge. Train derailment affecting waterway. Flammable liquids falling from bridge. Toxic gas cloud. Bridge lowering in front of ship. Person falling from bridge.

Danger imminent (Report ASAP before an accident.)

Initial damage assessment (Report ASAP after an accident.)

Who	Part	Action
Ship to VTS or Rail to VTS	DAMAGE REPORT	Answer these questions:
		1. Rail track obstruction or damage?
		2. Structural damage to bridge support?
Ship to VTS or Rail to VTS	RESPONSE INFORMATION	Answer these questions:
		1. People injured or in the water?
		2. Navigation channel passable?
		3. Pollution?
		4. Damage (fire, flooding, collapse, etc.)?

Appendix A — Terminology and phrases

From the The following terminology and phrases are used in the document.

- 1. The time referred to by the ship in the phrase <u>"...will call you at [time] to request a</u> <u>full lift...</u>" refers to the time of day that the ship is expected to make the lift request not the time of day that the ship should expect the bridge to be at a full lift.
- 2. The affirmation phrase <u>"Standing by for your call.</u>" means the following to the vessel:

With the information that I (referring to the bridge tender) have at this time, I should be able to lift the bridge when you call back at the time specified.

- 3. The phrase <u>*"train scheduled over the bridge"*</u> means that the train is expected to occupy the bridge rail block (circuit) at the request time thereby preventing the bridge from opening.
- The phrase <u>"...making a LIFT REQUEST. Request a full lift now."</u> satisfies 33 CFR 117.5 [Drawbridge Operating Regulations] which directs the bridge to open when the request is made. It says:

"...drawbridges shall open promptly and fully for the passage of vessels when a request to open is given in accordance with the subpart."

5. The phrase "<u>No bridge lift is required.</u>" means that the bridge is no longer under obligation to lift the bridge until another lift request is made by the vessel.