

DISTRICT 11 BRIDGE SURVEY GUIDE



**UNITED STATES COAST GUARD AUXILIARY
ELEVENTH COAST GUARD DISTRICT - NORTHERN REGION
DISTRICT STAFF OFFICE - AIDS TO NAVIGATION**

Version Feb. 2019

DISTRICT 11 BRIDGE SURVEY GUIDE

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Front cover photograph is the Rio Vista Bridge over the Sacramento Deepwater Channel

INTRODUCTION:

The Coast Guard relies on survey reports about bridge lighting, bridge fender and protection systems as well as other hazardous and nonstandard bridge conditions from mariners. In this regard, before May 1981, the Coast Guard annually inspected navigational lighting, fender and protection systems that were situated over the navigable waters of the United States. Subsequently, it was determined that an adequate high level of compliance could be achieved in response to reports of complaints or violations by professional and private mariners.

As a result, the Auxiliary plays an important part in bridge discrepancy notification in conjunction within the Navigation Systems Programs. Only AV-PQS Qualified & Certified Aid Verifiers are authorized to conduct annual bridge Surveys in the Eleventh Coast Guard District. All Auxiliary members should be on the lookout for any bridge discrepancy and to notify Coast Guard

OBJECTIVES:

1. To acquire a general knowledge of the different type of bridges and the responsibilities of the Auxiliary in reporting bridge discrepancies.
2. To become familiar with the requirements for bridge lighting, fender and protection systems.
3. To become familiar with the potential discrepancies on a bridge.

INFORMATION:

There are two basic types of bridges: **fixed** and **moveable span**. Moveable span bridges include **double-opening swing, single-opening draw, pontoon, single and double opening bascule, vertical lift and retractable bridges**.

In bridge construction, the Coast Guard District Commander (dpw) Bridge Section, having jurisdiction over the area in which the bridge is being built, prescribes lights and other signals that are to be displayed for the protection of navigation. When construction is completed, permanent lights and other signals approved by the Coast Guard District Commander (dpw) Bridge Section, must continue to be displayed



BRIDGE AND PIER LIGHTING:

Periods of operation require that bridge lights be displayed from sunset to sunrise or at other times when visibility is reduced to less than one mile. Bridge lights are not required for bridges over waters that are not open to navigation. Vessels transiting such waters do so at their peril with complete liability. Examples of the minimum lighting requirements for various type bridges are presented at the end of this section.

Center Channel Lights:

- Mark the center of the navigable channel. Commonly found on fixed bridges.
- Should appear as two 360-degree, green, range-lights affixed beneath the span or lip of the bridge.

Margin of Channel Lights:

- Mark the limits of the navigable channel as it passes under the bridge.
- Should be 180-degree red lights, facing the traffic as you approach the bridge in the channel.
- These lights should not be located below the lip of the bridge nor a significant distance above the lip.
- Traditionally, mariners feel that these lights mark the lip of the span.

Pier Lights:

- 180-degree red lights affixed to piers and face into the traffic as you approach the bridge in the navigable channel.

Axis Lights:

- 180-degree red lights fixed to piers on the axis (or turn), facing inward into the channel.

Moveable Span Lights:

- Commonly found on draw, swing, retractable, lift, and bascule bridges in a combination lantern in various configurations of red and green light fixtures.
- Light shows red when the bridge is closed and shows green when the bridge is open.

Preferred Channel Lights:

- Commonly found on bridges with multiple lighted navigable channels.
- Three white lights are fixed above the green center channel lights to indicate the preferred channel.

BRIDGE FENDER AND PROTECTION SYSTEMS:

Bridge fender and protection systems are designed to protect a bridge from vessels transiting under or near the bridge. The fender system is normally constructed of heavy wooden timbers lashed and/or bolted together along with lights and other aids that are prescribed by the Coast Guard District Commander (dpw) Bridge Section. All bolts must be countersunk.

Wales. (rub rails)

- Must be in good repair.
- No sharp metal or bolts should protrude into channel or be exposed at the corners.
- There should be no metal corners.
- Metal wales should have anti-spark protection.

Protective Piers.

- Must be wrapped with steel cable.
- Nothing should project into the channel from these protective piers.

Obstructions in the channel(s).

- Nothing may be hanging down from the top of bridge. Check the LNM for authorizations during periods of repair and reconstruction.
- Check depth of water in the navigable channel under the bridge and in the approach channels.
- Nothing should stick out of the sides of the bridge wales and piers into the navigable channel.
- Report any shoaling or other obstructions within the navigable channel(s).

Clearance Gauges on Drawbridges.

- Should be mounted to the right side of the bridge as you approach the bridge in the navigable channel.
- Should be located on both the upstream and downstream sides of the bridge.
 - Not required and usually not found on fixed bridges--at the discretion of the **Coast Guard District Commander (dpw) Bridge Section.**
- Should be readable for a one-half mile distance – 1,000 yards.
- Validate that both clearance gauges provide identical readings.
- When the lip of the span forms an arc or **haunch**, the bridge 's clearance at the edges of the navigable channel at the lowest point of the span over the navigable channel. Such bridges may have special instruction regarding their height.

Special Regulation Signs on Drawbridges

- Compare the regulations shown on the bridge 's sign with the —Bridge Regulations‡ shown in the —Special Regulations & Notes Check the Federal Regulations for the bridge in the latest edition of the Coast Pilot.
- When a bridge opening requires a phone call to the bridge tender, check that the phone number appears on the bridge 's sign. Call the phone number and validate that it works, but never request a test opening.



OTHER AIDS TO NAVIGATION ASSOCIATED WITH BRIDGES

- a. **Retro-reflective Panels on Bridge Piers** are high intensity red or green retro-reflective panels affixed to bridges or piers. These daymarks are similar to those that mark the edges of lateral channels under the IALA-B ATON System and they are used in a similar manner.
- b. **Daymarks** and **Lateral Lighting** are markings of the margins of the navigation channels through bridges with appropriate marks and lights installed on the superstructure or channel piers per the rules of the IALA B Aid to Navigation System.
- c. **RADAR Reflectors and RACONS** - Radar reflectors and RACON may be affixed to bridge structures, stakes or buoys in order to mark the edges and centerline of the navigation channel.
- d. **Fog Signals** are deployed on waterways where visibility is frequently reduced due to fog or other causes. One or more fog signals may be installed on a bridge. Normally, fog signals are listed in the Light List.
- e. **Painting of Bridge Piers and Walls** - The sides of bridge channel piers below the superstructure facing traffic may be painted white or yellow when they have become significantly darkened by weather.
- f. **Vertical Clearance Gauges** - When necessary for reasons of safety of navigation, vertical clearance gauges may be installed on a bridge. Clearance gauges must meet prescribed requirements. They are usually required on moveable span bridges.

BRIDGE DISCREPANCIES:

Bridge discrepancies that pose a hazard to navigation include the following:

- a. Clearance gauges are missing. Numbers are not legible, or number and/or characters are not readable from 1/2-mile minimum distance. Clearance gauges are often required on moveable span bridges.
- b. Unreadable drawbridge regulation signs. Drawbridge regulatory signs are normally required on all moveable span bridges.
- c. Bridge signals that are not functioning. Horns, whistles or sirens may be used as bridge signals.
- d. A vertical lift bridge that is not equipped with height indicator.
- e. A cable(s) is hanging below the bridge span 's lip or structure.
- f. A net or gondola is hanging below the bridge 's structure. Check LNM before reporting.
- g. Scaffolding is hanging below the bridge 's structure. Check LNM before reporting.
- h. Pier protection cells, planks, or coatings are missing. Steel sheathing is protruding into the navigable channel. Cells are damaged.
- i. A pile or dolphin cluster is broken off. Debris is protruding from a pile or dolphin cluster and is leaning into the navigable channel. The top of a pile cluster is wrapped with material other than wire cable.
- j. Ladders, platforms or rails are protruding into channel.

Bridge Fender Systems discrepancies:

Discrepancies on bridge fender systems that pose a hazard to navigation include the following:

- a. Bolts, washers, corner plates, steel members, wales (rub rails), etc., are protruding beyond the face (navigable channel side) of the wooden wales, pilings, sheathing or any other part of the system.
- b. Damaged steel plates and wales (rub rails) used at corners and other places where heavy wear may be encountered.
- c. A collection of mass debris is wedged in or behind fender systems.
- d. Dolphins on the fender side protrude into the navigable channel.
- e. Steel wales (rub rails) are not coated with non-sparking material instead of wood.
- f. Torn or loose ice protection or pier repair items are loose and present a hazard to navigation.
- g. The fender system is damaged due to fire, collision, and natural deterioration or rotting.

REPORTING DISCREPANCIES:

Upon discovering a bridge discrepancy complete a:

- **D11 Bridge Survey Report** (See pages 22 and 23 for an example).
- **NS-AN04 Bridge Discrepancy Report** (See pages 23 for an example).

Always perform a complete bridge check so that the Bridge Branch can provide information to the owner to make proper repairs. Photos of the discrepancy(s) always increase the credibility of your report.



D11 BRIDGE LIGHTING & FENDER SURVEYING GUIDELINES

The D11 (dpw)-Bridge Section appreciate the dedication provided by Auxiliary in support of the bridge survey program, and your willingness to provide critical first-hand knowledge of waterway and bridges in your area of operation. Your personal dedication in support of the Eleventh Coast Guard District Bridge program and the associated logistical issues are also gratefully acknowledged.

In May 1981, to reduce operational costs, the Coast Guard discontinued its program of annually inspecting navigational lighting fenders on bridges over navigable waters of the United States. These periodic inspections were useful in achieving a high level of compliance with bridge laws. The D11 (dpw)-Bridge Section asked the Coast Guard Auxiliary to undertake the Bridge Survey Program in 1986.

The Annual Bridge Surveys are done during the early months of the year, so those repairs can be completed before the beginning of the heavy recreational traffic. Commercial operators such as the San Francisco Bar Pilots, observe the major commercial bridges on daily bases and report discrepancies. Even though we do Annual Surveys as a scheduled event, reporting bridge discrepancies should be year around process, which can be done by any Auxiliarist, travel the waterways.

There are three parts to conducting an annual bridge survey:

1. [Preparation](#)
2. [On-site Observation](#)
3. [Reporting](#)

The surveys can be done on an ATON Patrol under orders with your boat; by a Land Mobile Patrol under orders; or by using any non-reimbursable means of transportation as a reportable 32 mission on a 7030.

PREPARATION

Materials needed to do a bridge survey include pen & pencil; writing surface, notebook and plain paper; binoculars; digital camera; large scale chart of the area; road maps if done by land; latest Local Notice to Mariners; and the **D11 (dpw) Bridge Survey Report Form** for the assigned Bridge you'll be surveying.

Check materials and review the bridge survey form; locate the Bridge on the Chart or road map for best route to bridge; compare latitude and longitude with that on the bridge survey form; **always check the Local Notice to Mariners for unusual circumstances to the bridge you plan to survey**; plan the route and the best order to do the bridges; and brief anyone assisting in the survey as to procedures.

ON-SITE OBSERVATIONS

The best time to survey a bridge is before daylight saving time and as close to dusk as possible, this way, you can visually check the **conditions of the fender system, lights, clearance gauges, bridge name sign, bridge operations sign, debris accumulation** and other characteristics of the bridge. Take digital photograph of any discrepancy you find. Then you can come back shortly after dark and check the lights. Verify that the bridge survey form and what you observe is the same.

Remember that your task is to observe and report on the condition of the bridge lights, signage, gauges & fenders. You are not to enforce the bridge laws. Also remember that you are conducting

a **SURVEY** not an inspection. Not all drawbridges always have bridge tenders on duty. You do not need the bridge tender to do a Survey. **DO NOT REQUEST A BRIDGE OPENING JUST TO SEE IF THE GREEN LIGHTS COME ON WHEN IT'S OPEN.** Check the back of the Bridge Survey Report for a drawing of the lighting characteristics of your bridge. Try to take a digital photograph of any discrepancy to submit with your report.

REPORTING

The D11 (dpw) bridge section would like if possible, to scan both sides of your bridge survey report and e-mail to the DSO-NS. Following fundamental surveying process should ensure adequate reporting when a bridge is observed to be deficient. Such as in navigational lighting, clearance gauges, operation, fender problems, debris build up encroaching into the channel and maintenance, etc., **Circle all discrepant lights on the back of the bridge survey form** and you should E-mail (a scanned copy is best) to the DSO-NS. If you find a significant problem (light out or other hazardous condition's) report this information ASAP. For all bridge related issues, including lighting, operation, obstructions, construction, demolition, etc. contact the Eleventh Coast Guard District Bridge Administrator 24-hour cell phone at **510-219-4366**. Flotsam may accumulate on and near bridge piers and abutments. Mariners should approach all bridges with caution. A vessel delay at a drawbridge may be reported to the District Bridge Administrator by telephone, or by using the Delay_Report_11-2017.pdf included in the Enclosures section of this Local Notice to Mariners. Note on the back of the bridge survey form any actions you did in reporting the discrepancy and e-mail the bridge survey form to the DSO-NS ASAP.

Again D11 (dpw) bridge section would like if possible, to scan both sides of your bridge survey report & digital photographs and e-mail to the DSO-NS. This is best & fastest way to get the bridge observations to D11 (dpw)-Bridge Section. You may also use U.S Mail your bridge survey (include a digital photograph of any discrepancy with your report) to the DSO-NS.

You can also download additional bridge survey forms from. The USCG D11 (DPW)-Bridge Section website has made available for printing bridge report form for reporting bridge discrepancy throughout the year or if the dog eats the original survey form. <https://www.pacificarea.uscg.mil/Our-Organization/District-11/Prevention-Division/> >Click on the **Bridge Section** at top of page.

CG-2541-D11

1. **REPORT USED FOR ANNUAL BRIDGE SURVEY.** (To be completed by the last weekend of May) - (AV-PQS ONLY)
2. This format is best and should be used to **Report Any Bridge Discrepancy any time** by any member.
2. Fill in the proper blanks on the front of the form
3. Circle all discrepant Lights on back bridge drawing
4. Note all discrepancies and action took on the back of the form with N arrow & downstream direction noted
5. **Scan both sides of form and Email to the DSO-NS for recording and submitting to D11 (dpw) Bridge Section**
6. Remember to fill out & send an ANSC 7030 to your FSO-IS Officer for AUXDATA.

OR

ANSC 7055 use as a last resort if you can't use the **CG-2541-D11** from the D11 (dpw) website.

1. BRIDGE REPORT: (ALL MEMBERS)
2. Use this form **ONLY** to report bridge **discrepancies** throughout the year.
3. E mail to DSO-NS
4. Send copy to your FSO-NS if required by Flotilla procedures
5. Keep a copy for your record
6. Remember to fill out & send an ANSC 7030 to your FSO-IS Officer for AUXDATA.

If you have any questions or problems contact your FSO-NS, SO-NS, or DSO-NS.

Email ASAP all **BRIDGE** reports directly to the DSO-NS, dvc.on@comcast.net, is best and fastest way or If you can't email, then US Mail is OK to:

James B. Duncan, DSO-NS
8630 Duryea Drive
Sacramento, CA 95828-5819

**The Annual
Bridge Surveys
shall always be
completed by
May 31st of each year**

AID VERIFIERS Preparation CHECK LIST FOR BRIDGE SURVEY

AV-PQS are tasked with verifying the bridge lights and number, clearance gauge, and fender system to see that they are Watching Properly. Bridge Lights must be checked when the lights are on. Check the fender system & Condition of vertical clearance gauges for good condition and free of debris.

Materials Required in your Bridge Survey Kit:

- ✓ **CG 2541-D11** - One BRIDGE Survey Form for each bridge to be surveyed.
 - READ AND UNDERSTAND ALL OF THE INFORMATION PROVIDED ON THE FORMS (Type of bridge, light characteristics and other information when on site etc.).
 - Is distributed via DSO-NS → SO-NS → FSO-NS → Aid Verifier (AV) → ADSO- NS /B.
- ✓ **ANSC 7030** - AUXDATA Report form always used the latest Revision.
 - Completing the 7030 form is part of your bridge survey
- ✓ **ANSC 7055** - Bridge Survey Report form.
 - This form is to be used only to report Bridge Discrepancy when not doing an annual bridge survey.
- ✓ **Current LOCAL NOTICE TO MARINERS**, always check for changes to you bridges. Download from: <https://www.navcen.uscg.gov>
 - Click on LNMs than Click on Map District 11 than the **New** Weekly Edition
- ✓ **CHART** - always use current edition or corrected largest scale chart
- ✓ **ROAD MAP** if doing by vehicle,
- ✓ **COAST PILOT 7** of the needed pages for the Bridge location.
 - a. NOAA-NOS places all Bridges on the charts.
 - b. Therefore - It is highly recommended that you plot all the Bridges be surveyed from the Bridge Survey Form before you depart home or dock.
 - c. download above information from: <https://www.charts.noaa.gov/ChartCatalog/MapSelect.html>.
- ✓ **BINOCULARS** to check bridge lights fixtures, signs, clearance gauge, and fender system if you can 't see very well.
 - **CAMERA or Cell Phone Camera** is optional but encouraged to photograph any major discrepancy. Digital Photos can be printed on the back of bridge Forms and e-mailed for fast reporting.
- ✓ **TELEPHONE NUMBER**, Eleventh Coast Guard District Bridge Administrator 24-hour cell phone at 510-219-4366 ready to report any CRITICAL discrepancies to your surveyed bridge ASAP. See Below:

CRITICAL Discrepancies - Report by Cell Phone ASAP

1. Bridge total lights outage
 2. Light signal showing improper characteristics
 3. Lights obscured or extinguished.
 4. Vandalism of bridge lights and fender system either in progress or the result of such actions.
 5. Bridge damaged by vessel collision.
 6. Collapsed bridge structures, fender systems and obstructions to navigable channels.
- ✓ **CHECK BRIDGE LOCATION BEFORE GOING TO THE BRIDGE**
 - PLOT THE GIVEN LAT/LONG of the Bridge:
 - This way you will not, perhaps, go to the wrong Aid.
 - Yes, check the last LMN for changes to Bridge conditions.

ON SITE VERIFYING GROUND RULES

Aid Verifiers should review the following verifying rules. In the event you need any clarification or feel that additional items should be added, please correspond directly

1. AID VERIFIERS shall not climb any bridge structure or fender system at any time, for any reason without the approval of the D11 (dpw), nor shall they enter private property with owner approval for the purpose of bridge survey.

On Site Verification

- ✓ **DO YOUR OWN WORK:** Make all required bridge entries, circle all extinguished lights on the bridge drawing on back of form.
- ✓ **CHECKING BRIDGE LIGHTS:** Bridge Lights must be checked when the lights should be on.
- ✓ **RECORDING ON FORM.**
 - Compare the bridge characteristics with those listed on the Bridge Survey Form. *Remember:* All lighted aids must be checked when the lights should be on.
 - Light visibility on a clear night should meet the 1-mile requirement.
 - It's best to check bridges in the daytime first for visual discrepancies to gauges, signs, & fenders, note the time on the report)
 - Then after dark to check the lights, also note the time on report.

RECORDING ALL INFORMATION ON BRIDGE FORMS

- Make all comment on the back of form.
- Record any and all discrepancies on the Bridge Survey Form.
- Take photographs of any discrepancies
- PRINT or WRITE LEGIBLE all BRIDGE INFORMATION - Please no light pencil entries (Can't Xerox)
- THESE FORMS ARE LEGEL DOCUMANTS AND CAN BE USED IN COURT.

REPORTING

- ✓ REPORT ALL **CRITICAL DISCREPANCY** to the bridge by Cell Phone Eleventh Coast Guard District Bridge Administrator 24-hour cell phone at 510-219-4366. A Broadcast Notice to Mariners may be needed and inclusion in the next Local Notice to Mariners. After reporting discrepancy to D11 (dpw) Bridge Section then E-mail the Bridge Survey Reports to DSO-NS ASAP.
- ✓ Report all **URGENT Discrepancies** to the D11 (dpw) Bridge Section weekdays is 1-510-437-3516 or 1-510-437-3514. After reporting discrepancy to D11 (dpw) Bridge Section then E-mail the Bridge Survey Reports to DSO-NS ASAP.
- ✓ Do not forget to submit an ANSC 7030 to your FSO-IS or SO-IS

BRIDGE AND FENDER DISCREPANCIES

Observing and Reporting - Lists of Aids to Navigation and their characteristics are in the Coast Guard Light List. Every Aid Verifier & Auxiliary facility should have a copy of the current applicable light list on board, updated through the most recent Local Notice to Mariners; Auxiliarists assist the Coast Guard by observing and promptly reporting all discrepancies in Aids to Navigation and the Bridges Lighting & Fender Systems. The reporting method used should be related to the danger that is posed by discrepancy. Routine aid discrepancies **should not** be report by radio, cell phone, telephone, but by e-mail to the DSO-NS

CRITICAL Discrepancies - Report by Radio or Cell Phone

1. Light signal showing improper characteristics or rhythm.
2. Light signal obscured or extinguished.
3. Vandalism of bridge lights and fender system either in progress or the result of such actions.
4. Bridge damaged by vessel collision.
5. Collapsed bridge structures, fender systems and obstructions to navigable channels.

URGENT Discrepancies - Report by Telephone or Email

1. Daymarks missing or damaged by causes other than vandalism.
2. Sound signal failure:
3. Light burning dim or showing reduced intensity. (Note: Verify by close examination that smoke, haze, fog, or other atmospheric is not causing the –burning dim|| or reduced intensity conditions.)
4. Lights partly or totally obscured.
5. Bridge light outages, inoperative draw, swing, lift or retractable bridges.

ROUTINE Discrepancies - Report by Mail or Email only

1. Faded daymark and signs located on bridge structures
2. Numbers that are obliterated and not easily read or identified.
3. Other bridge or fender system discrepancies
4. Debris build up encroaching into the channel and maintenance

- ✓ ALWAYS Submit an **CG 2541-D11 Survey Report** or an **NS-7055** Bridge Discrepancy Report via email to the DSO-NS ASAP.
- ✓ Don't forget to submit an ANSC 7030 to your FSO-IS.

SOME HELPFUL THINGS TO REMEMBER:

1. **LED Lights** will most likely have a clear lens & solar panels.
2. When on a PATROL, Each Aid Verifier SHALL do your own ANSC 7030 for your Bridge activity while on patrol.
3. When using **CG 2541-D11 Survey Report** & NS-7055 form always used the latest Revision, all others are obsolete.
4. Points will be awarded only if you submit your ANSC 7030 to your FSO-IS or SO-IS for input into AUXDATA.
5. Correctly filling out the **CG 2541-D11 Survey Report** & NS-7055 form with Digital Photos is far more valuable than a long-written report.
6. **Digital Photos** should be printed on the back of all Forms (if possible) and emailed to the DSO-NS ASAP.
7. Useful web Sites with loads of information for the Aid Verifier
USCG D11 (DPW) for Bridge, Private aid, Federal aid information.
<https://www.pacificarea.uscg.mil/Our-Organization/District-11/Prevention-Division/>
USCG NAVIGATION CENTER, Light List, Local Notice to Mariners.
<https://www.navcen.uscg.gov/>

CG 2541-D11 Survey Report

Report of Bridge Survey Eleventh Coast Guard District Bridge Office					
Instructions		1. Submit this report to the Auxiliary Coordinator as soon as possible after conducting the survey. 2. The best time to survey bridges is shortly before sunset so you can observe any hazards or discrepancies before dark, then observe the lights after dark. 3. If conducting the survey by land, respect all property rights. DO NOT TRESPASS. 4. Auxiliaries do not have law enforcement authority. Take care that your survey is not interpreted as a law enforcement action. 5. Any discrepancy, minor or major, should be reported immediately to the D11 Bridge Office at (510) 437-3518, Monday through Friday, during working hours or to the nearest Coast Guard Sector Command Center, by telephone or radiotelephone, during nights, weekends, and holidays. If in doubt, report it.			
<u>NAME OF BRIDGE</u> MILLERS FERRY (GUISTI'S) BRIDGE		<u>LATITUDE</u> 38° 13.4' N	<u>LONGITUDE</u> 121° 30.4' W		
<u>NAME OF WATERWAY</u> MOKELUMNE RIVER		<u>MILES ABOVE MOUTH</u> 12.0	<u>TYPE OF BRIDGE</u> SW		
<u>NAME/ADDRESS OF BRIDGE OWNER</u> San Joaquin Count P.O. Box 1810 Stockton, CA 95201		<u>NAME ADDRESS OF BRIDGE OPERATOR (if different)</u>			
Fill out the section below and annotate the picture on the reverse. Show north arrow or direction of current					
TYPE OF LIGHTS	Number of Lights	Are Lights Correctly Placed?	Are Lights of Proper Color/Arc?	Are Lights Visible for 1 Nautical Mile	State Condition of Lights
Channel Center Lights	0				
Margin of Channel Lights	0				
Pier Lights	6	YES	YES	NO	SEE COMMENTS
Pier Axis Lights	0				
Moveable Span Lights	3	YES	YES	NO	SEE COMMENTS
Preferred Channel Lights	0				
OTHER FEATURES	How Many?	LLNR	Characteristic	Range	Working Properly?
Fog Signals	0	0	N/A	N/A	
RACONS	0	0	N/A	N/A	
Condition of fenders: Dolphin good Condition of Vertical Clearance Gauges: SEE COMMENTS Is the bridge name shown? YES What name is shown? MISSERS FERRY Is sign visible to mariners? YES Are Navigational clearances impaired by disrepair, cables, etc? NO Are Navigational Clearances impaired by an accumulation of debris? NO Is there any equipment (i.e. barges, scaffolds) in the navigation spans that are not listed in the LNM/BNM? NO If a drawbridge, is it capable of operating? ? Are the operating regulations and radio call sign posted? YES Is there evidence of bridge or fender damage that might be from vessels? NO					
Date and Time of Survey		Name and Member Number		Home Telephone Number	
3/1/17 1605		JAMES B. DUNCAN		916-689-9304	
3/1/17 1920		Signature of Surveyor		Auxiliary File Number	
		<i>James B. Duncan</i>		48	

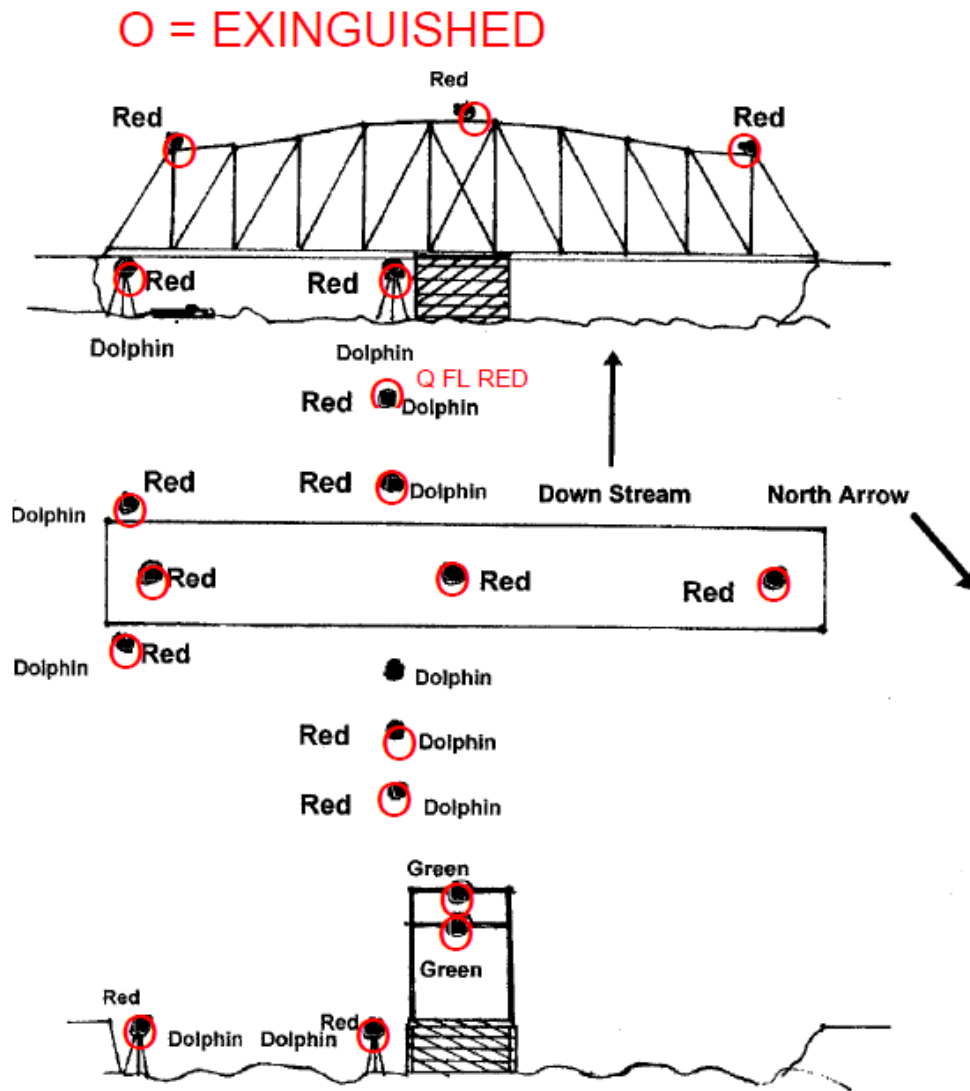
FRONT PAGE

CG 2541-D11 Survey Report

MILLERS FERRY (GUISITI'S) BRIDGE

AUXILIARY FILE NUMBER 48

THROUGH - TYPE SWING BRIDGE (1 MARKED NAVIGATION OPENING)



Comments:

All lights were extinguished at 1920 hours.

The most down river dolphin has a Q FI Red light on the dolphin.

The down river vertical clearance gauge is missing, Up river gauge good.

BACK PAGE

All annual “D11 Report of Bridge Survey” forms shall be returned to the DSO-NS by May 31 each year.

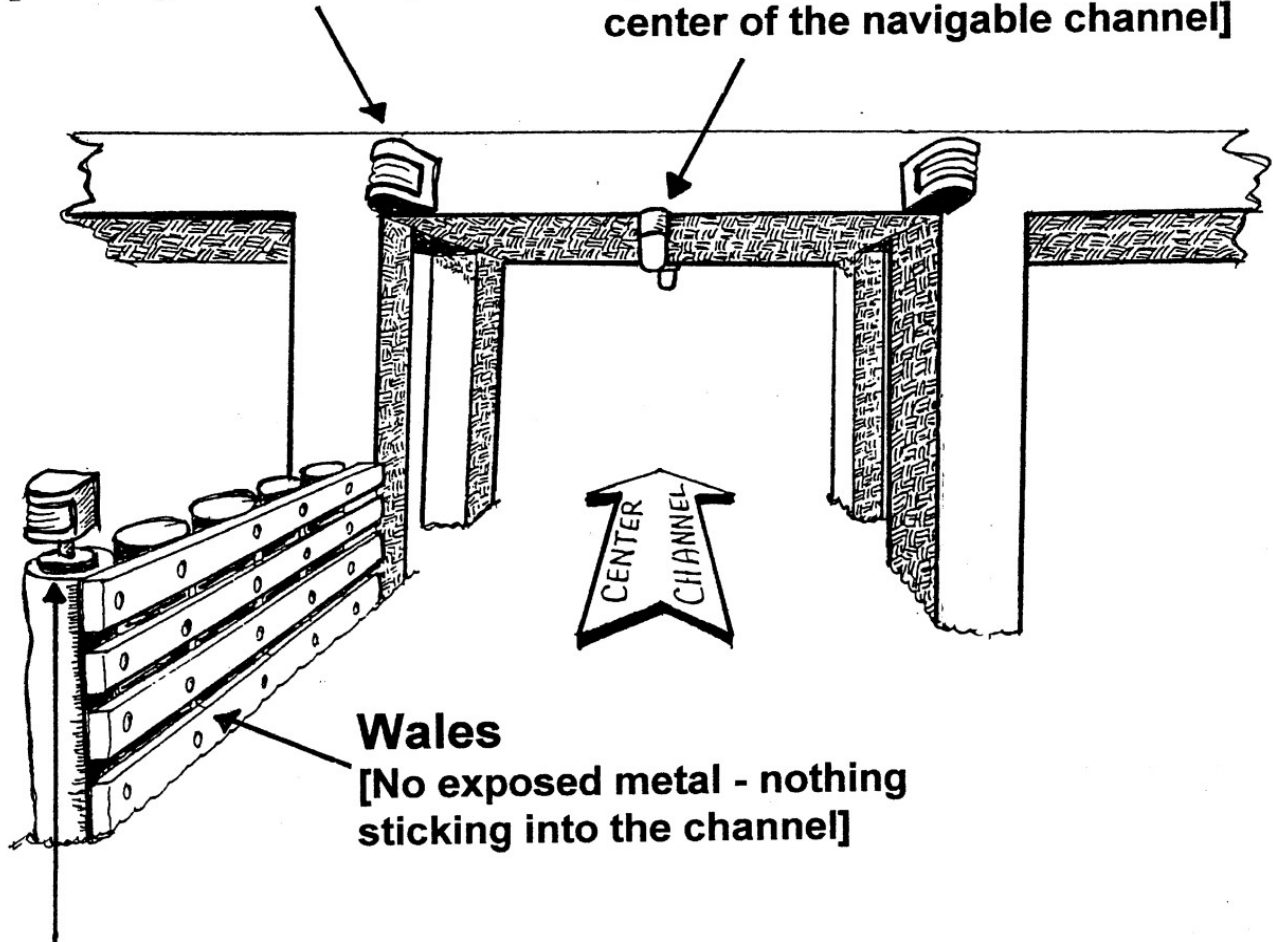
1. Complete the “**Bridge Survey**” with the number of lights in each light type affixed to the bridge by answering each of the four questions about each light type by entering a Yes or No in the first columns and the condition that you observed. Circle the light on the back with the problem and state the problem.
2. Complete the “**QUESTION SECTION** by answering each question.
3. Always enter the **date & time** when you did the surveyed. and **sign** your name, member number and telephone number on each D11 Bridge Survey that you will e-mail directly to DSO-NS who will Record & forwarded to D11 (dpw) Bridge Branch to avoid delays transmitting your report to the Coast Guard. They may contact you directly for answers to any questions that may arise. Also, enter your current e-mail address in the Comments Section on the back of the report
4. You and SO-NS will receive a **CONFIRMATION OF REPORT RECEIVED** by email from the **DSO-NS** within 24 hours.
5. Send an E-mail 7030 to your FSO-IS or SO-IS ASAP



FIXED BRIDGES

Axis or Margin Lights
[180 degree lanterns]

Center Channel Lights
[360 degree Green lanterns
forming a range under the
lip of bridge and marking the
center of the navigable channel]



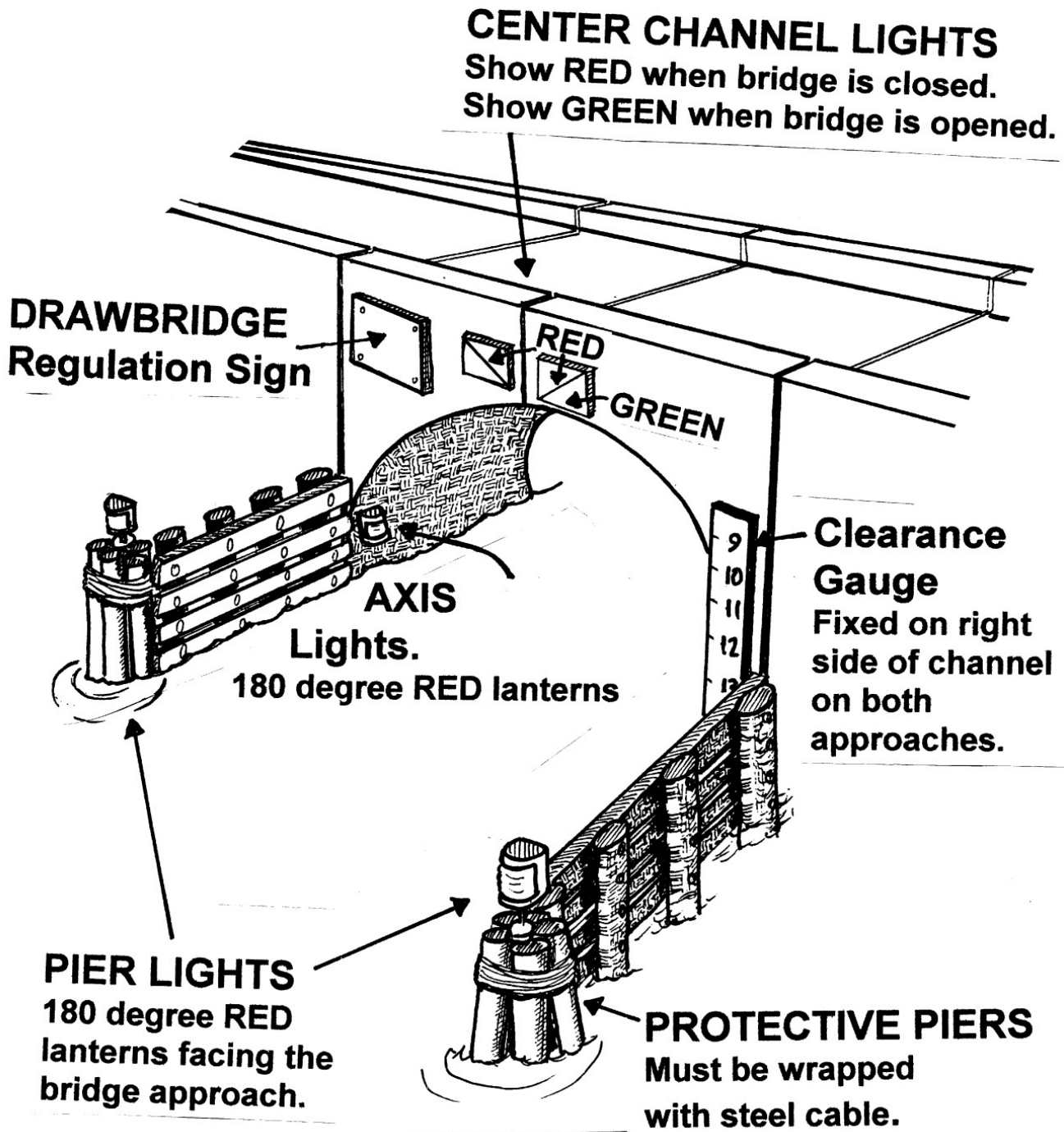
Wales
[No exposed metal - nothing
sticking into the channel]

Pier Lights
[180 degree RED lanterns
facing bridge approach]

BASCULE BRIDGES

[bas'kul] French for a seesaw.

A kind of drawbridge that is counter-weighted so that it can be raised and lowered easily.



UNITED STATES COAST GUARD AUXILIARY 11NR

Aids to Navigation Mission

ANSC-7030 Activity Report - Mission Procedure

I. **Effectively:** This procedure is effective as of January 1, 2019.

- Each Aid Verifier shall prepare their own ANSC-7030 Activity Report - Mission

II. **Forms used for getting Bridge AUXDATA Credit.**

- Prepare an **ANSC-7030 Activity Report – Mission 32** form to get credit for an NS Activity. The form is available from the National form’s web site.
- Please use a PC to fill out the e form 7030
- If you are **not** using a PC to fill out this form, please print all numbers and symbols clearly.

III. **Procedure for filling out an ANSC-7030 Activity Report – Mission for INDIVIDUAL Navigation Systems activity.**

HEADER SECTION	
Division	Enter your Division Number.
Flotilla	Enter your Flotilla Number.
Mission Date	Enter the date in DDMMYY format.
SECTION I – TYPE OF RESOURCE	
<ul style="list-style-type: none"> • Always check “Unit/Individual” as the type of resource. 	
SECTION II – TIME & MISSION	
Time	<ul style="list-style-type: none"> • Enter the “START” and “FINISH” times for your NS activity. • However, when you perform NS activity while on a patrol, under orders: • Use the Patrol’s Finish Time as your Start Time. • Your finish time should be no longer than it takes you to finish all your Bridge Survey reports & the 7030 for that day after the end of the patrol’s Finish Time for all the NS activity that you are reporting that was accomplished while on the patrol. <p style="margin-left: 40px;">◇ Don’t forget that the coxswain has already recorded your underway time on a separate ANSC-7030 report for the Patrol.</p> <p style="margin-left: 40px;">◇ NOTE: When you use the same hours that were reported on the ANSC 7030 submitted for the patrol, your submission will reject.</p>
Mission	<p>Select the appropriate NS mission:</p> <ul style="list-style-type: none"> • 30 - ATON MISSION – Use the mission when reporting Federal aid verification and discrepancy reporting activity. <ul style="list-style-type: none"> ◇ Use for any time spent providing service to the Coast Guard by servicing Federal Aids to navigation as outlined in COMDINST 16500, ashore or afloat. • 31 – PATON MISSION – Use this mission for reporting private aid verification and discrepancy activity. <ul style="list-style-type: none"> ◇ Use for any time is spent providing service to the Coast Guard in support of the Private Aids to Navigation program as outlined in COMDINST 16500.16a, either ashore or afloat. • 32 – BRIDGE MISSION – Use this mission for reporting bridge-checking activity. <ul style="list-style-type: none"> ◇ Use for any time spent providing service to the Coast Guard in support of the Bridge Checking Program, either ashore or afloat. • List multiples of the 30, 31, and 32 missions that are performed on a single day on a single ANSC-7030 report. <ul style="list-style-type: none"> ◇ This is the preferred practice to save AUXDATA processing time.
SECTION III – ACTIVITY DETAIL - ATON	

Fill in the results of your AN activity:

- When reporting **Mission 30** activity, report the number of:
 - ◇ Federal ATON Discrepancies.
 - ◇ Federal ATONs Watching Properly.
- When reporting **MISSION 31** activity, report the number of:
 - ◇ PATON Discrepancies.
 - ◇ PATONS Watching Properly.
- When reporting **MISSION 32** activity, report the number of:
 - ◇ Bridge Discrepancies.
 - ◇ Bridges Watching Properly.

SECTION IV CREW ASSIGNMENTS

- Enter your “Member Number” and “Name” as “Lead.”
- **Each member must submit their own ANSC-7030 report** to get credit for their **INDIVIDUAL** “NS” activity

SECTION V LOCAL NOTES and/or REMARKS

- The OPCOM will always be **11-37250** for which the **INDIVIDUAL** “NS” activity was performed.
- List the Bridge names & number for the items that you have reported in Section III – Activity Detail - ATON.

Date Submitted	Enter the date that you are submitting the report.
Submitting Member Name	Enter your Name
Report Number	Enter a control number for your own benefit. This field is not picked up in AUXDATA.

FORWARDING AN ANSC-7030 REPORT

- Forward your ANSC-7030 E to your **FSO-IS Staff Officer** within 10 days of your **INDIVIDUAL** NS observation(s).

AUXDATA (1/2019) DSO-NS Update

WHERE DO I SEND ALL MY REPORTS IN D11NR?
E-mail all BRIDGE Reports to DSO-NS.
E-mail all Bridge 7030 Cat 32 to FSO-IS or SO-IS

Example of a NAVIGATION SYSTEMS Individual 7030

U.S. COAST GUARD AUXILIARY
ACTIVITY REPORT - MISSION

Division 03 Flotilla 05
 MISSION DATE 28FEB16

SECTION I TYPE OF RESOURCE: Air Boat Road Unit/Individual

SECTION II TIME & MISSION

START	Change 1	Change 2	Change 3	Change 4	Change 5	FINISH
1830	1930					2200
MISSION	32	31				

SECTION III ACTIVITY LOG DETAILS

Location: SACRAMENTO RIVER, CA OPCON: 11-37270

PATROL MISSIONS ONLY

SAR ASSISTS ONLY

ATON	ATON Discrepancies	PATON Discrepancies	Bridge Discrepancies
		2	1
	ATONS Watching Property	PATONS Watching Property	Bridges Watching Property
		1	1

SECTION IV MEMBER INFORMATION

Member ID	Last Name and Initials	Trained
1	AID VERIFIER.	<input checked="" type="checkbox"/>
2		<input type="checkbox"/>
3		<input type="checkbox"/>
4		<input type="checkbox"/>
5		<input type="checkbox"/>
6		<input type="checkbox"/>
7		<input type="checkbox"/>
8		<input type="checkbox"/>
9		<input type="checkbox"/>

LOCAL NOTES (non-AUXDATA):
 Recipient's email address: ho-w@stglobal.net
 Your email address: hnt23@coastnet.net

SUBMIT

SECTION VI REMARKS

Surveyed 2 Bridges, 1 Street RR Discrepant & Freeport Watching Property. Verified 3 PATON's, 2 discrepant & 1 Watching Property.

Date submitted: 28FEB16 AID VERIFIER Report number: 1617

Note: While on any orders patrol the Coxswain will submit your patrol time. The Aid verifier must submit their own individual 7030 for NS activities to show the number of aids & bridges you verified.

Must always be Unit/Individual.

Only cat 30, 31, 32

OPCON is always 11-37270

The "ATON ACTIVITY" fields are shown. Record the number of aids & bridges you Verified.

Only 1 Aid Verifier's name.

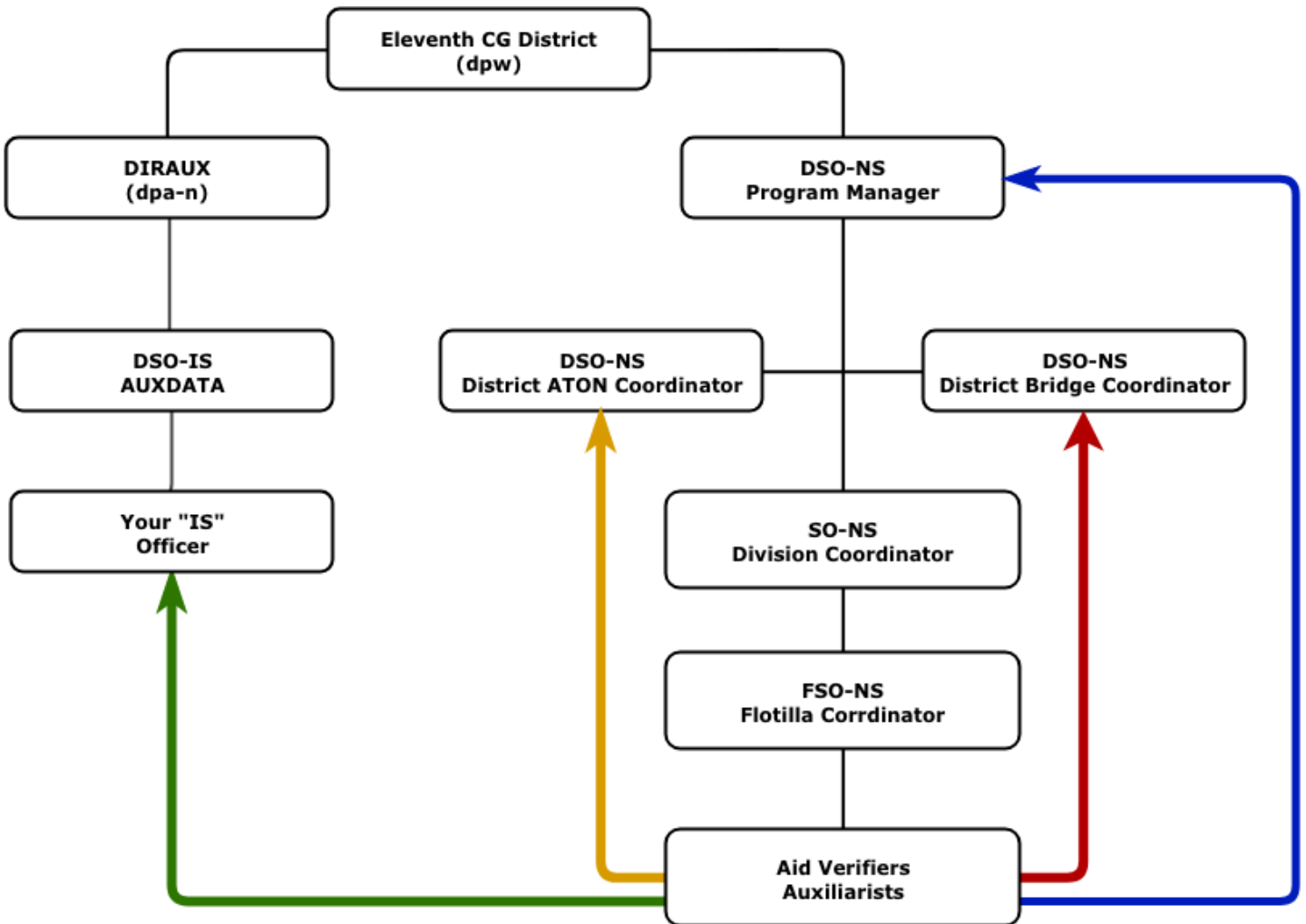
Best to SUBMIT on the 7030 E form to your FSO-IS or SO-IS only. (Do not send copies of your 7030 to any FSO-NS, SO-NS, DSO-NS officer)

Best to list the name or number of aids you that you check for your Records in the Remarks section.

Important Notes:

1. If you're only doing a Bridge Mission this day, enter only Category 32 in the Mission line.
2. If you're doing Multiple Missions (Bridge 32 & PATON-31) this day, you must always enter both Category 32 & 31 in the Mission line.

ATON, BRIDGE, CU FLOW CHART



Complete Forms for Flowchart





- Bridge Survey Forms & NS-7055 to DSO-NS 
- PATON Sheets & NS-7054 to DSO-NS 
- ANSC 7030 to FSO-IS 
- All Chart Updating Forms to DSO-NS 

Chart of Abbreviations

ATON	Aids to Navigation	PATON	Private Aid to Navigation
FR, F-RNG	Front Range	NWR	National Wildlife Refuge
RR, R-RNG	Rear Range	MS	Marine Sanctuary
SSIG	Sound Signal	MBMS	Monterey Bay MS
LT	Fixed Light	CBMS	Cordell Bank MS
LB	Lighted Buoy	FIMS	Farallon Islands MS
LBB	Lighted Bell Buoy	NPS	National Park Service
LGB	Lighted Gong Buoy	SAC	Sacramento
LWB	Lighted Whistle Buoy	SF	San Francisco
LHB	Lighted Horn Buoy	RCN	RACON
ULB	Unlighted Buoy	RBN	Radiobeacon
IULB	Inflatable ULB	DBN	Daybeacon
BB	Bell Buoy	OBS	Obstruction
GB	Gong Buoy	ANCH	Anchorage
WB	Whistle Buoy	BSN	Basin
HB	Horn Buoy	PHD	Pier head
REG	Regulatory	BKW	Breakwater
SPD	Speed	YC	Yacht Club
PT	Point	CH	Channel
RIV	River	SH	Shoal
WHF	Wharf	JCT	Junction
HBR	Harbor	JTY	Jetty
SLGH	Slough	WO	White & Orange
RK	Rock	WU	White & Blue
RF	Reef	R	Red
CRK	Creek	G	Green
WK	Wreck	Y	Yellow
DWSC	Deep Water Ship Channel	F	Fixed
ENT	Entrance	FI	Flash
APP	Approach	S	Sign
MB	Mooring Buoy		
DGPS	Differential GPS		
WAAS	Wide Area Augmentation System		