



OFFICE OF THE DISTRICT STAFF OFFICER NAVIGATION SYSTEMS

- TO: Bruce Martin, District Captain 11N Dean McFarren, COMO District 11N Curtis Han, District Chief of Staff 11N District 11 North Board & Staff
- CC: ADSOs-NS AV-PQS Bill Wicks, DSO-NS 11S Ed Martin, Auxiliary National NS Captain Mike Salsman, PATON Administrator, D11

FROM: Michael Hay, DSO-NS 11N

DATE: July 6, 2022

#### Highlights:

NS Program underway for 2022

- 786 PATONs to verify
- 52 bridges to survey

Waterways Management (dpw):

• Continue Working multiple locations on Lake Tahoe for permit/buoy changes

• Bair Island adjustments

National NS Work:

• BC-PNP hosting C-06 school in August 2022

#### Details:

- Surveyed 41 of 52 bridges 79% complete
  - Note: Bridge Surveys were due May 31, 2022
- Verified at least 158 of 790 PATONs 20% complete
- Waterways Management:

- Continued work on discrepancies for Lake Tahoe: Fleur Du Lac, Tahoe Keys, Tahoe Keys HOA and NASA buoy lighting issues.
- Still waiting on Tahoe City to re-file permit. Permit and updating to occur upon receipt of new permit.
- Bair Island PATONs were removed.
- National NS Branch:
  - Enrollments for C-06 Alameda/Oakland school are filled at 22 students and 2 instructors. Class is scheduled for August 12-14, 2022 at Executive Inn, Oakland.
  - New drop down/fill in PDF for form 7054 now available from the Forms Warehouse.

#### Reports:

NS Report by Division- all Activities:

| 10 (m) 68                                    | DISTRI                    | CT 113   | 2022, BR | IDGE,  | ATON, & O  | HART UP                                  | DATING     | SUMMARY    | TABLE        |            | JULY      | 1          | 2022    | 1217.2   |
|--|---------------------------|----------|----------|--|--|--|------------|------------|--------------|------------|-----------|------------|---------|----------|
| Div.   | AIDS TO NAVIGATION        |          |          |  | No. and and  | BRIDGES                                  |            |            | Private Aids |            |           | Aid Ve     |         | erifiers |
|  | В                         | A        | Р        | U  | AOR  | Check                                    | %          | NotChack   | AOR          | Check      | %         | NotCheck   | Trainee | PQS      |
| 1  | 10                        | 1        | 38       |  | 4  | 4  | 100%       | 0          | 105          | 31         | 30%       | 74         | 2       | 6        |
| 3  | 21                        | 1        | 10       | 8  | 15   | 15                                       | 100%       | 0          | 33           | 10         | 30%       | 23         | 0       | 4        |
| 4  | 1.0                       |          |          |  | 2  | 2  | 100%       | 0          | 68           | 7          | 10%       | 61         | 0       | 0        |
| 5  | 11                        |          | 46       |  | 11   | 11                                       | 100%       | 0          | 103          | 40         | 39%       | 63         | 0       | 6        |
| 6  | 2                         |          | 56       | 1  | 2  | 2  | 100%       | 0          | 69           | 56         | 81%       | 13         | 1       | 1        |
| 8  |                           |          | 18       |  | 1  |  | 0%         | 1          | 18           | 14         | 78%       | 4          | 0       | 1        |
| 10   |                           |          |          |  | 9  |  | 0%         | 9          | 55           |            | 0%        | 55         | 0       | 3        |
| 11   |                           |          |          |  | 0  |  | NA         | 0          | 145          |            | 0%        | 145        | 0       | 3        |
| 12   | 7                         |          |          |  | 8  | 7  | 88%        | 1          | 194          |            | 0%        | 194        | 0       | 4        |
| Total  | 51                        | 2        | 168      | 9  | 52   | 41                                       | 79%        | 11         | 790          | 158        | 20%       | 632        | 3       | 28       |
| Total Aids to Navigation                     |                           |          | 230      | Number of members submitting an ATON or CU Reports |  |  |            |            |              |            | rts       | 18         |         |          |
| Total Chart Updating 1/1/22 to 12/31/22      |                           |          |          | 0  | B=Bridge, A=ATON, P=PATON, U=Unathorized                 |  |            |            |              |            |           |            |         |          |
| Total AT                                     | ON/CU /                   | Activity |          |  | 230  | C=C                                      | hart Updai | e, CP=Coa  | ist Pilot    | Jpdate, CO | P=Chartin | g Credit P | oints   | 197762   |
| AUXDATA II 2022 Bridge & ATON Activity 1-Jul |                           |          |          | 1-Jul  | 2022   | 2022 CHART UPDATING SUMMARY TABLE JULY 1 |            |            |              |            | 2022      | Туре       |         |          |
| AUXDATA II 2022 Bridge & ATON Ac             |                           |          |          | N Activity   | Div. 113 Jan 1 to Dec 31, 2022 113 Jan 1 to Dec 31, 2023 |  |            |            |              | 2023       | Reports   |            |         |          |
| Div.   | AIDS TO NAVIGATION AIL NS |          |          | S Activitys  | Reports  |  |            | 0 CUP      |              | Reports 0  |           | CUP 2022   |         |          |
|  | BV                        | BD       | AD       | PV   | PD   |  | 1          |            |              | 118/184    |           |            |         |          |
| 1  | 1                         | 9        | 1        | 23   | 6  | (*)                                      | 3          |            |              |            |           |            |         |          |
| 3  | 8                         | 9        | 1        | 2  | 21   | Trainee                                  | 4          |            |              |            |           |            |         |          |
| 4  |                           |          |          |  |  | Counted                                  | 5          |            |              |            |           |            |         | 19.23    |
| 5  |                           | 1        |          |  | 2  |  | 6          |            |              |            |           |            |         |          |
| 6  |                           | 2        |          | 21   | 4  |  | 8          |            |              |            |           |            |         |          |
| 8  |                           |          |          |  |  | -  | 10         |            |              |            |           |            |         |          |
| 10   |                           |          |          |  |  | E  | 11         |            |              |            |           |            |         |          |
| 11   |                           |          |          |  |  | è  | 12         |            |              |            |           |            |         |          |
| 12   | 6                         | 1        |          |  |  | 5  | Total      |            |              |            | 0         | 0          | 0       | 2022     |
| Fotal  | 15                        | 22       | 2        | 46   | 33   | 4  | # Membe    | r submitti | ng NOA       | A-Coast S  | urvey Rep | ort-ASSIS  | т       | 0        |
| Total Aids to Navigation                     |                           |          |          | 118  | 51%  | Total                                    | 0          | 0          | 0            | 0          | 0         | 0          | RC=26   |          |

Note: Reported July 1, 2022

| А         | D                            | U         | U             | C         | Г                     | G                 | п           |
|-----------|------------------------------|-----------|---------------|-----------|-----------------------|-------------------|-------------|
| DIST      | RICT 113 VERIFICATIO         | ONS by    | WORK          | AREA      | YEAR TO<br>DATE       | 7/7/              | 2022        |
| Work Area | Work Area Description        | Aid Total | Total<br>"WP" | Total "D" | Total Not<br>Verified | Total<br>Verified | Inspect %   |
| 0.01      | West SF Bay                  | 105       | 28            | 4         | 73                    | 32                | 30%         |
| 0.02      | East SF Bay                  | 155       | 0             | 5         | 150                   | 5                 | 3%          |
| 0.03      | Sacramento River Area        | 33        | 2             | 8         | 23                    | 10                | 30%         |
| 0.04      | South SF Bay                 | 68        | 1             | 6         | 61                    | 7                 | 10%         |
| 0.05      | San Pablo to Suisun Bay      | 113       | 20            | 20        | 73                    | 40                | 35%         |
| 0.06      | North Pacific Coast          | 69        | 43            | 13        | 13                    | 56                | 81%         |
| 0.08      | North Coast                  | 18        | 16            | 1         | 1                     | 17                | <b>94</b> % |
| 0.09      | New York Slough & West Delta | 39        | 0             | 0         | 39                    | 0                 | 0%          |
| 0.10      | San Joaquin River Area       | 55        | 0             | 0         | 55                    | 0                 | 0%          |
| 0.11      | Lake Tahoe                   | 146       | 6             | 0         | 140                   | 6                 | 4%          |
|           | TOTALS                       | 801       | 116           | 57        | 628                   | 173               | 22%         |

## NS Report by Division- PATON Verifications:

Note: Reported July7, 2022 and accounts for discrepancy with prior report

## AuxData II Reporting:

| A/PATON WORK REPORTED IN AUXDATA II |           |           |        |          |              |  |  |  |
|-------------------------------------|-----------|-----------|--------|----------|--------------|--|--|--|
| Codes 30, 31, 32                    |           |           |        |          |              |  |  |  |
|                                     |           |           |        |          |              |  |  |  |
|                                     | Divisions | People    |        | Hours    | Aids/Bridges |  |  |  |
| Divison                             | Reporting | Reporting | Events | Reported | Reported     |  |  |  |
| 1                                   | 2         | 4         | 7      | 17       | 40           |  |  |  |
| 3                                   | 1         | 2         | 12     | 21.5     | 41           |  |  |  |
| 5                                   | 1         | 1         | 2      | 3        | 3            |  |  |  |
| 6                                   | 1         | 2         | 4      | 5.5      | 26           |  |  |  |
| 12                                  | 1         | 2         | 2      | 6        | 7            |  |  |  |
| Totals                              | 6         | 11        | 27     | 53       | 117          |  |  |  |

Note: Reported July 1, 2022 – encouraging people to complete AUXDATA II input for work completed in order to receive due credit for their work and effort.

## Around the Horn (District 11N):

- Div 1- All bridges completed. PATON verifications being completed and planned. Directly supporting Division 4 due to absence of AVs. Contributed to Bair Island changes. Reporting definitive issues at Coyote Point and Brisbane.
- Div 3 All bridges completed. PATON verifications being completed and planned. Recorded 17 bridges, 10 PATONs, 1 ATON, 8 7054s completions with corresponding AuxData II entries
- Div 4 New SO-NS identified, Kevin Quinn and potential AV, Michael Brown identified.

- Div 5- All bridges completed. PATON verifications completed and planned. All Suisun Bay completed. Issues with Bodega Bay Marine Lab being reported. Conducted two additional patrols for follow up of PATON issues not seen at prior night patrols. Big thanks to AudreyL, Tom Hurley's support of PATON missions.
- Div 6- Reporting major deployment of 21 buoys in Stillwater Cove without permits.
- Div 8- reports new AV support in Crescent City to support Lighthouse (Class I aids) support.

## DSO 11N Goals & Objectives:

- *COMPLETED:* Distribute all electronic and paper PATON verification sheets to SO-NSs in both 11N and 11S by mid-February 2022
- **COMPLETED:** Distribute all electronic and paper Bridge survey sheets to SO-NSs in 11N by end of January 2022
- Complete 100% of District 11N bridge surveys by May 31, 2022 79% completed on time.
- Complete 100% of District 11N PATON verifications by September 30, 2022
- Calculate and nominate AV personnel for NS awards at the end of the year
- Improve count of AV personnel in district 11N 6 planned attendees for PCA Faire in September.

## Waterways Management (dpw) PATON Administration Goals:

- Stay current with all IATONIS changes approved during the year *Current as of today's date.*
- Input all PATON verification data into Access db and IATONIS on a timely basis *Current*
- Define and implement a feedback loop for Discrepant Aid follow-up *initiated some new ideas related to Bair Island and Lake Tahoe*
- Report updated progress monthly *done and current*
- Eliminate roadblocks to institutionalizing new Access db for multi-user usage
- Support DSO-11S in enhancing their program
- Ensure currency of Class I and II PATON verifications for District 11

## National Goals:

- Host C-06 School in Alameda during August 2022 to be held Aug 12-14 11N is hosting the vent at the Executive Inn in Oakland.
- Teach one session of C-06 School *will co-teach Aug 12 C School*
- **COMPLETED**: Participate in drafting of program materials as needed
- Continue participation in CG Research department project to enhance Navigation Systems reporting requirements as required.

## Challenges/Obstacles/Opportunities:

In recognition of COVID impacts, serious weather conditions impacting outside activities, retirement and loss of AV personnel, loss of facility support and restrictions on mode of travel to do verifications, it is understood that 100% completion is a stretch goal for 2022. Consequently,

priorities have been established to complete surveys and verifications in the following order: Bridges, Class I, Class II and then Class III PATONs

<u>Photos</u>:

None

## Nav Notes:

# Secrets of the Most Accurate LOP on Earth

Excerpted from Seamanship Secrets

When the two charted objects line up as viewed from your boat – say a church spire behind a tank – you have a *range* (also known as a *transit*). A range provides a flawless line of position (LOP). When planning a cruise, look ahead, behind, and to the sides of your track for pairs of charted objects that will line up as you proceed. Natural ranges help you stay on track, show your boat's speed of advance, and strengthen the quality of any position fix. You can use any combination of landform tangents, landmarks, beacons, and buoys as a range. You needn't convert a bearing to true or magnetic or even use a protractor. Just draw a line on the chart through the two objects, extend the line over the water, and you're somewhere on that LOP. No error, no slipped parallel rulers, no fuss, and no doubt about it. Cross that LOP with a bearing to an object off the beam, and you've got a solid fix. Here are some ways to use ranges:

**Track drift:** Keep in a channel by choosing two objects that are in line and dead ahead of your course. But check dead astern, too. Over-the-shoulder ranges give the quickest warning that your boat is drifting off track. (See below for corrective actions when you drift off-range.)

**Track advance:** The elapsed time between successive ranges along the side of a trackline will enable you to calculate your boat's speed over ground, or *advance*, along the trackline.

**Track turns:** Use a natural range to tell you when to turn onto a new trackline. Plot this range onto the trackline ahead of time. Label the line TB for *turn bearing*.

**Fast and easy line of position (LOP):** When two charted objects line up, write down your time and draw the LOP over your trackline. This gives you

an instant *estimated position* (EP). Upgrade it to a fix by taking and plotting a bearing to a charted object 60 to 120 degrees off the range.