

# NS-AN04a AID TO NAVIGATION REPORT - Field Explanations

**GENERAL** - This form is used to report discrepancies observed on aids to navigation, such as buoys, lights, day beacons, ranges, and electronic aids, which are owned or operated by Federal Government. A complete listing of reportable aids can be found in the *NS-AN02 Federal Short Range Aid to Navigation Training Guide*. Discrepancy reports should contain as much information as possible as well as digital photos as evidence of the problem being observed. Such detail will not only assist in prompt correction of deficiencies, but also may serve as defense in cases of liability.

**Aids found watching properly are never reported to the Coast Guard unless the Coast Guard specifically requests a report.** Any activity related to checking aids to navigation, whether they are found discrepant or watching properly, should always be reported to the AUXDATA System on an 7030 Activity Report – Mission - Individual. Credits for annual AN awards occur only when ANSC 7030 reports are recorded in AUXDATA.

Charting errors on aids, such as names, numbers, symbols, colors and abbreviations of characteristics, should also be reported as Chart Updates to NOAA on an *NS-CU03 Chart Update Report*.

## SECTION TOP

**Report Type:** The “**AtoN-** Report – Mission 30” block has been checked.

## SECTION 1 - OBSERVER’S IDENTIFICATION

**MEMBER NUMBER:** Enter your 7-digit Auxiliary Member ID Number.

**LAST NAME, FIRST NAME AND INITIAL:** Enter your last name and initials.

**TELEPHONE NUMBER:** Enter the telephone number where you can be reached during normal business hours.

**UNIT (DIST/DIV/FLOT):** Enter a three-digit District, a two-digit Division and a two-digit Flotilla code, i.e., 013-10-07, etc

**DATE OBSERVED:** Enter the date when the discrepancy was observed, formatted as dd-mmm-yy, i.e., 23-MAR-09.

**TIME OBSERVED:** Enter the time when the discrepancy was observed, formatted as hh/mm. i.e., 1455.

**OPCON:** Enter the OPCON number or name for the Coast Guard unit for whom you are working.

**E-MAIL ADDRESS:** Enter your E-mail address. “NONE” is an acceptable entry.

## SECTION 2 - COAST GUARD NOTIFICATION - USE ONLY WHEN YOU HAVE COMMUNICATED DIRECTLY TO A C.G. AGENCY BY PHONE, RADIO OR E-MAIL.

- When an aid discrepancy is classified as Critical or Urgent, it is necessary to communicate the problem directly with the appropriate CG Unit or agency by the most expeditious method available. Enter the date and time when the verbal report was made.
  - Many districts do not require a hard copy report when a verbal report is made directly to a Coast Guard unit. Many CG Units find duplicate reports confusing and superfluous. Follow your District’s rules for reporting.
- The purpose of this section is to avoid or minimize incidents of report duplication and the time wasted tracking them down. Enter the name of C.G. unit or agency you have notified, and the method used to communicate from the drop down menu, as shown below.
- Routine discrepancies are usually communicated by hard-copy reports so it is not necessary to use this section for routing reports.

**COAST GUARD UNIT NOTIFIED** Enter the name of the CG ANT, Unit or Agency that was notified.

**TIME NOTIFIED** Enter the time, using the 24-hour clock, when the CG Unit or agency was notified. [hhmm].

**DATE REPORTED** Enter the date when the CG Unit or agency was notified.

**COMMUNICATION METHOD** Enter one method from the menu:

RADIO  
TELEPHONE  
E-MAIL  
OTHER - See Comments.

## Section 3 – AID OWNERSHIP AND IDENTIFICATION

**AID OWNERSHIP:** Check the ownership for the aid being reported.

**COAST GUARD** (Federal Short Range Aid to Navigation-ATON)  
**STATE**  
**PRIVATE** (Private Aid to Navigation-PATON)  
**USACE** (US Army Corps of Engineers)  
**NOAA**

**LLNR** Enter the Light List Number in this field.

**OFFICIAL NAME OF THE AID BEING REPORTED:** When reporting a Federal Aid (AtoN), report the full description as shown in the Light List.

**AID NUMBER** If needed for clarification, enter the Aid Number for the aid in this field. Every aid to navigation should have an Aid Number.

**MILE MARKER:** When aid is on the Western Rivers, enter the mile marker number for the aid.

**CHART NUMBER:** Enter the chart number for the largest scale NOAA chart where this aid is located. The number for a NOAA chart is found in the lower left-hand corner of the chart.

**CHART EDITION:** Enter the edition for the chart you are using. The Chart Edition of a NOAA chart is usually found on the lower left-hand corner of the chart.

**CHART DATE:** Enter the publication date for the chart you are using. The Chart Date of a NOAA chart is usually found on the lower left-hand corner of the chart

## **Section 4 – HORIZONTAL AND VERTICAL LOCATIONS**

**LATITUDE:** Enter the latitude of the aid as **DD-MM-SS.SS N**.

**LONGITUDE:** Enter the longitude of the aid as **DDD-MM-SS.SS W**.

**GPS DATUM:** Indicate the Horizontal Datum that is set up in your GPS. This datum should match the horizontal datum on the nautical chart you are using in order to produce accurate reports about the location of the object.

**WGS84**  
**NAD83**  
**OTHER, see Comments.**

**METHOD USED TO TAKE FIX:** Indicate the locating technology that you used to obtain the fix that you are reporting.

**GPS**  
**DGPS**  
**GPW with WAAS**  
**OTHER, see Comments.**  
**N/A**

**QC (QUALITY) CHECK:** Indicate the type of quality report that was used to define the accuracy of the reported fix.

**EPE** (Estimated Position Error)  
**HDOP** (Horizontal Dilution of Position)  
**N/A** (Not Available)

**QC-QUALITY READING:** Enter the quality reading from your GPS set as defined by the selection made in the “QC-Quality Check” field above. EPE readings are reported in feet. HDOP readings are numerical expressions. The highest quality HDOP readings range between 1 and 2.

**TIME WHEN TAKEN:** Enter the time when the fix was taken in “HHMM” format.

**OFFICIAL NAME OF LOCATION:** Enter the name of the locality where the aid is located or charted.

**GPS MANUFACTURER AND MODEL NUMBER:** Enter the name of the manufacturer and the model number of the GPS set used to take the reported fix.

**GPS OPERATION:** Enter the operating condition of your GPS when the fix was taken from the Drop-Down Menu. Accuracy guidelines require 3D or 3D Differential operation.

**2 D** (less than three satellites are being read by your GPS. Expect high EPE and HDOP readings)  
**3 D** (three or more satellites are being read by your GPS)  
**3 D Differential** (four or more satellites are being read by your GPS)  
**N/A** (Not Available)

**CHARTED DEPTH:** Enter the depth as charted on the NOAA chart for the area where the aid being reported is located. N/A is a valid entry.

**DEPTH DIFFERENCE:** When a Charted Depth is entered, the system calculates and reports the difference to the reported depth corrected for charted datum. Review this difference and make a comment, if necessary.

**METHOD USED FOR DEPTH:** Indicate the tool used to determine the depth alongside the aid or item from the menu.

**ECHO SOUNDER**  
**LEAD LINE**  
**SOUNDING POLE**  
**DEPTH NOT TAKEN**  
**OTHER, explain in comments.**

**MANUFACTURER AND MODEL NUMBER:** Enter the name of the manufacturer and the model number when an echo sounder is used to take the depth..

**OBSERVED DEPTH:** Enter the depth that you observe. When using an echo sounder, enter the reading directly from the echo sounder.

**TRANSDUCER CORRECTION:** When an echo sounder is used, enter the distance from the mounted position of the echo sounder's transducer to the water line. Enter a zero in this field when not applicable.

**HEIGHT OF TIDE:** When operating in a tidal zone, enter the Height of Tide for the time when the depth was observed. Take this data from the almanac screen on your GPS. Be sure to reference the closest substation. Also, this field can be used for normal pool corrections on rivers and other controlled basins and waterways.

**CORRECTED DEPTH:** Review the calculated depth difference and use the Comments section to explain any concerns.

**TIME OF OBSERVATION:** Enter the time when you recorded the depth of the water at the aid.

## **SECTION 5 - AID TO NAVIGATION CHARACTERISTICS**

**TYPE OF AID:** Check [X] all of the listed items that define the aid. Multiple selections are allowed.

FLOATING BUOY  
FIXED STRUCTURE  
LIGHTED  
SOUNDING CAPABILITY  
ELECTRONIC DEVICES  
RADAR REFLECTOR  
OTHER, explain in Comments.

**TYPE OF BUOY:** Check [X] the material type that best describes the floating buoy.

WOOD  
METAL  
FOAM  
PLASTIC  
OTHER, explain in the Comments.

**STRUCTURE MAKEUP:** If aid is fixed, select the attributes that best describe the structure.. Multiple selections are allowed.

WOOD  
METAL  
SINGLE PILE  
MULTIPLE PILE  
DOLPHIN  
OTHER, explain in Comments.

**LIGHT COLOR:** If aid is lighted, select the color of the light that the aid displays.

RED  
GREEN  
WHITE  
YELLOW  
OTHER, explain in Comments.

**SOUNDING DEVICE:** When "Sounding Aid is selected in "Type of Aid" above, report the type of sounding device on the aid.

BELL  
GONG  
HORN  
WHISTLE  
ELECTRONIC  
OTHER, explain in Comments.

**ELECTRONIC DEVICE:** When "Electronic Device" is selected above, check [X] the type of electronic device on the aid.

RACON  
FOG DETECTOR  
WIND GENERATOR  
ELECTRONIC TRANSFORMER STATION  
METEOROLOGICAL STATION  
WIND MEASURING MAST  
OTHER, explain in Comments.

## **Section 6 – DISCREPANCIES OBSERVED ON AIDS**

**CRITICAL DISCREPANCIES:** Check off [X] any Critical discrepancies that apply.

1. Shrouded or covered with ice.
2. Improper light characteristics.
3. Light is obscured.
4. Light is extinguished.
5. Lantern is damaged. (Photo)
6. Buoy is sinking. (Photo)
7. Buoy is submerged.
8. Buoy has capsized. (Photo)
9. Aid is off-station.
10. Aid is missing.
11. Aid is adrift.
12. Aid is stranded. (Photo)
13. RACON is not operating.

14. RACON is showing improper characteristics.
15. Radio Beacon is not operating.
16. Radio Beacon has a timing error.
17. Aid was vandalized. (Photo)
18. An object obstructs the light. (Photo)
19. Aid's structure has collapsed. (Photo)

**URGENT DISCREPANCIES:** Check off [X] any Urgent discrepancies that apply.

1. Light is burning dim or showing reduced intensity.
2. Light is partially obscured by dayboards. (Photo)
3. Dayboard(s) is missing. (Photo)
4. Dayboard(s) is damaged. (Photo)
5. Sound signal failure observed. Explain in Comments.
6. Battery box is missing. (Photo)
7. Battery Box is damaged. (Photo)
8. Fog Signal is inoperative.

**ROUTINE DISCREPANCIES:** Check off [X] any Routine discrepancies that apply.

1. Aid is obscured by foliage or brush. (Photo)
2. Dayboard is faded so color of aid is compromised.
3. Extensive bird fowling on aid. (Photo)
4. Aid is damaged by collision. (Photo)
5. Paint is deteriorated so color of aid is compromised. (Photo)
6. Dayboard(s) is delaminating. (Photo)
7. Numbers or letters on aid obliterated or missing. (Photo)
8. Extensive deterioration or rotting of structure. (Photo)
9. Aid is leaning more than 15 degrees. (Photo)
10. Vent Valve discrepancy. (Photo)
11. Vent Pipe (tube) discrepancy. (Photo)
12. RADAR reflector discrepancy. (Photo)
13. Tapper(s) discrepancy on sound signal.

**DOCUMENTATION AND SPECIFICATION CHECK:** Check off [X] that your observation of the Federal Aid matches the entry in the Light List and the abbreviations shown on the NOAA chart. Explain any mismatches in the COMMENTS section of this form. Also check that the characteristics of a Federal Aid, a Private Aid, or a Non-Permitted Aid comply with the IALA-B standards for Aids to Navigation. Select the option(s) that apply to your observations for the aid you are reporting. The numbers match those referenced on the ATON Observation Worksheet.

1. AID IS DOCUMENTED CORRECTLY.
2. OBSERVED AID DOES NOT MATCH AID'S DESCRIPTION IN THE LIGHT LIST. Explain in Comments.
3. OBSERVED PATON DOES NOT MATCH ITS PERMIT SPECIFICATIONS. (Photo)
4. OBSERVED AID DOES NOT MATCH THE CHARTED SYMBOLS AND ABBREVIATIONS. (Also submit a Chart Update Report.
5. OBSERVED AID DOES NOT COMPLY WITH THE IALA-B SYSTEM STANDARDS. (Photo) Explain in Comments,
6. OBSERVED AID DOES NOT COMPLY WITH THE DATA SHOWN IN THE COAST PILOT. Explain in Comments.

## **SECTION 10 – COMMENTS**

Enter any appropriate or required comments that helps prove your observations.

## **SECTION 11 – REPORT DISTRIBUTION**

**DATE SUBMITTED** Enter the date when you submit your report.. The rest of the fields in this section are optional and for reference only at this time.

**FORWARD TO:** Check [X] this box and enter the name of the CG Agency to which your report must be sent per your District procedures.

**COPY TO:** Check [X] this box and enter the name to whom you sent a copy of your report.