



# TURBOWIN Plus

## Version 2.2



TurboWin+ was developed by the Royal Netherlands Meteorological Institute (KNMI) and endorsed by the World Meteorological Organization (WMO) for use on Voluntary Observing Ships. The Bureau of Meteorology (Australia), Deutscher Wetterdienst (Germany), Met Office (United Kingdom) and Environment Canada also contributed to the development of TurboWin+. TurboWin is the most used marine observing software in use today throughout the Voluntary Observing Ship (VOS) program today.

Meteorological observations made on board ships are a vital component of the WMO Global Observing System (GOS) provided that the observations are accurate and of high quality. VOS Ships are a key component of GOS and in climate research. Long ago it was recognized that these observations are subject to keying errors, coding errors, calculating errors, etc... To achieve some quality control of the observations before they are used in real time, TurboWin+ contains over 200 built-in quality control checks which are applied before the observation is transmitted.

TurboWin+ is a user friendly system that assists the observer with many menus, pictures, photos, forms, help pages, output options, and automated calculations in reporting marine observations. It also provides for the automated compilation, archiving of observations, and ease of transmission ashore to Meteorological Centers, by using Inmarsat-C or E-mail.

### **SYSTEM REQUIREMENTS**

Minimum requirements: Windows XP/Vista/7/8.1  
Internet Explorer 4.0 or higher  
High Color (16-bits) or better screen setting  
Screen resolution 600 x 800 (minimum)  
Java 7 or higher installed. **(If JAVA 7 or higher is not installed, see JAVA instructions)**  
128 Mb available hard disk space

### **UPGRADING AN EXISTING TURBOWIN INSTALLATION**

If a previous version of TurboWin is installed on the computer, the older version should be uninstalled first before proceeding with the TurboWin+ installation. See Uninstall procedures.

## INSTALLING TurboWin+

TurboWin+ must be installed on the computer's hard drive. It cannot run from the CD. Installation on a networked computer may require administrator privileges to install.

### TurboWin Installation CD

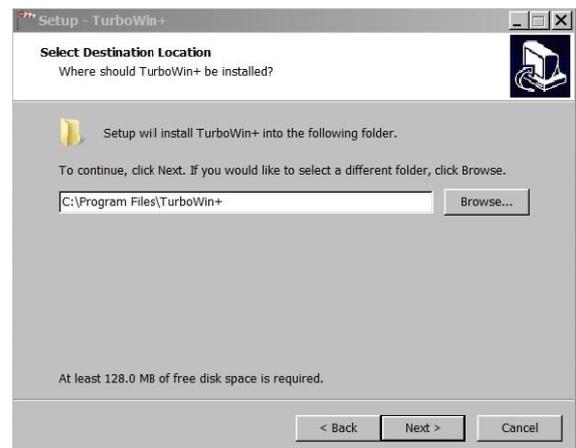
Insert the TurboWin+ Installation CD provided by your servicing PMO in the CD ROM drive on your computer. The CD should start automatically and display the Setup Wizard screen.

If the Setup Wizard does not appear:

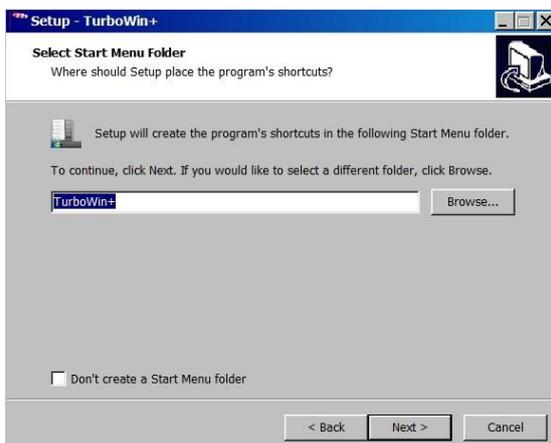
- Open **Windows Explorer**;
- Select the **CD ROM** drive;
- Open the **TurboWin+** folder.
- Double click on the **setup\_turbowin+.exe** file.



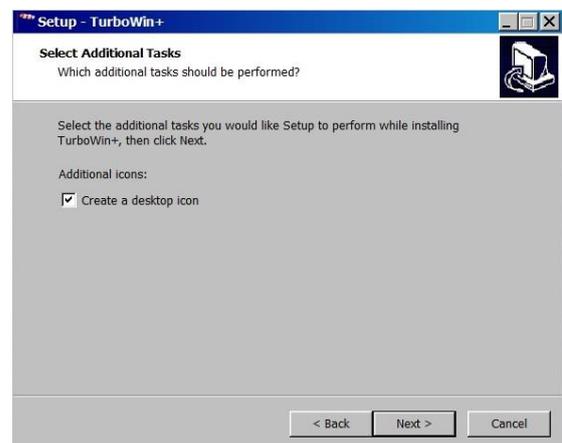
Click Next



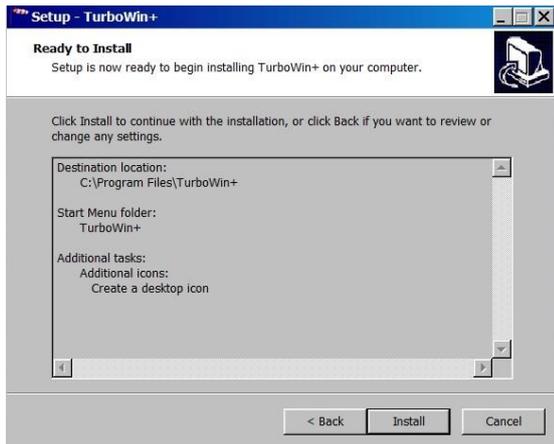
Recommend use the default location to install TurboWin+ C:\Program Files\TurboWin+ Click Next



Do not change. Click Next



Click "Create a desktop Icon. This will place a TurboWin+ shortcut Icon on your desktop. Click Next.



**TurboWin+ is ready to install. Click Install.**



**When install, complete, click Finished.**

TurboWin+ is now installed and ready to use.

Double click on the TurboWin+ Shortcut on the desk Top to start TurboWin+.



**TurboWin+ Directory Structure should look like this.**

On **32-Bit** computers TurboWin+ will be installed in the following location and directory structure:

```
C:\Program Files\TurboWin+
  amver
  docs
  help
  lib
  logs
  rtxserial
    turbowin_jws
    turbowin_jws_offline
    turbowin_plus_offline
  TurboWin+_install
  unins000.dat
  unins000
```

On **64-Bit** computers TurboWin+ will be installed in the following location and directory structure:

```
C:\Program Files (x86)\TurboWin+
  amver
  docs
  help
  lib
  logs
  rtxserial
    turbowin_jws
    turbowin_jws_offline
    turbowin_plus_offline
  TurboWin+_install
  unins000.dat
  unins000
```

## INSTALL NOTES

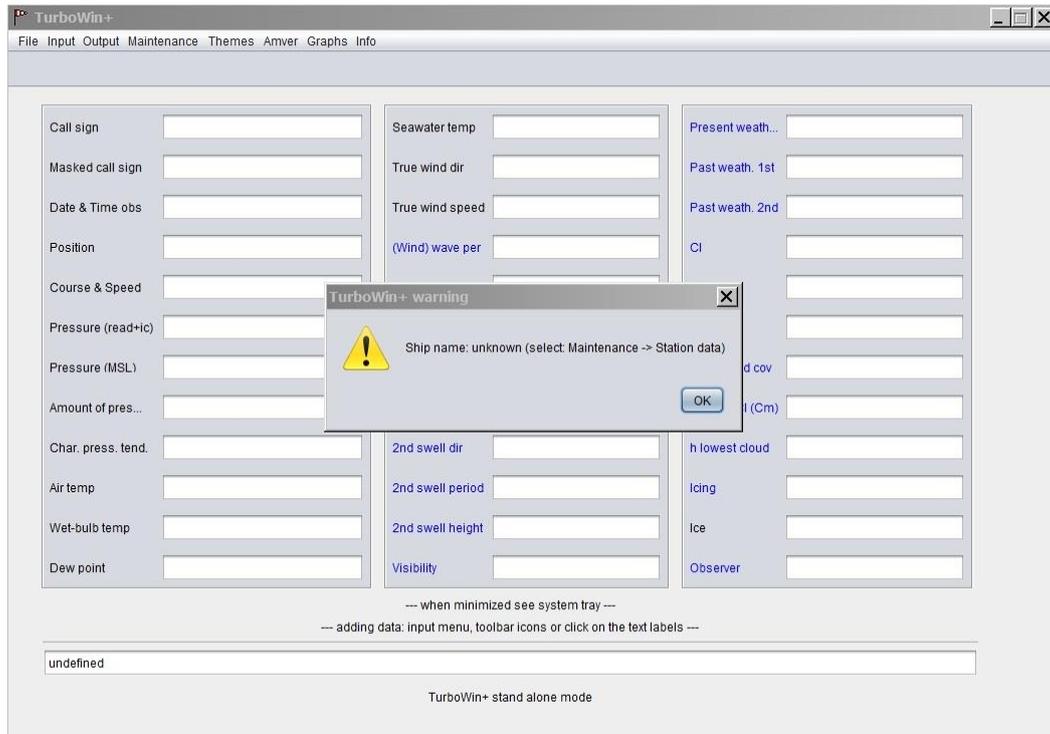
1. Java 7 or higher is must be installed on the computer for TurboWin+ to operate.
2. After opening TurboWin+ for the first time, you will be asked to fill out the Station Data. Once filled out, the TurboWin+ will create a text file called **configuration.txt** in the Log directory where the station data is saved.
3. Also once the Observer and Captain data is filled in, TurboWin+ will create a text file for each (**Observer.txt**) and (**Captain.txt**) and save them in the Log directory.
4. After the first observation is taken, TurboWin+ will create the IMMT.txt file in the log directory. This file is a special coded archive file of all observations taken. Each time an observation is taken, the observation will be appended to the IMMT.txt file.
5. For TurboWin+ to operate correctly it **Must Have Permissions** to **Read, Write** and **Create** to the following files:
  - configuration.txt
  - observer.txt
  - captain.txt
  - IMMT.txt
6. In some cases you will have to log in as the Administer to install or change permissions.

## CONFIGURATION

The very first time you start TurboWin+, you will see a warning box stating;

**“Ship Name Unknown (select maintenance -> Station Data)”**

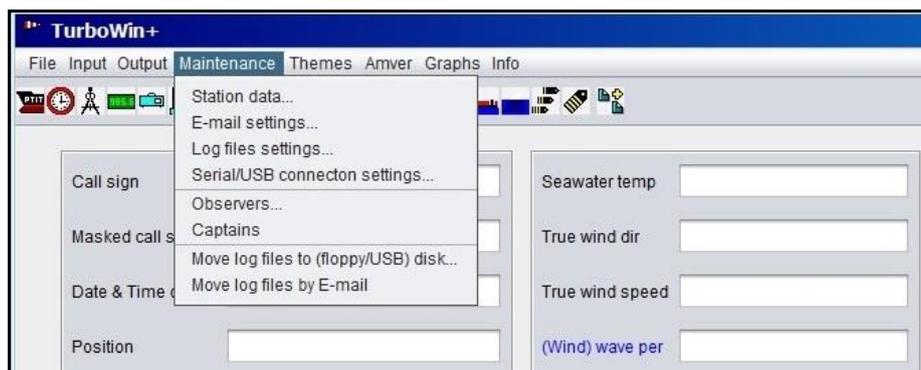
TurboWin+ needs to be configured first with some ship’s information before proceeding with an observation or AMVER Report.



For TurboWin+ to operate properly, “Station Data”, “E-Mail Settings”, “Log File Settings”, “Observers”, “Captains” entries are required. This information only has to be filled out once, or when vessel information has changed.

At the top of the Main Page, select “**Maintenance**”. You will be prompted to enter a **password**.

**JWS01** (password)



## STATION DATA

- **Ship Data:** Input Ship Name - IMO Number - Call Sign
  - **Masked call Sign:** For security reasons it's possible to use a VOS identifier instead of the ship's call sign. This is called the Masked Call Sign. There is no public access to the VOS ID's, so it's not possible to link a VOS ID with a specific ship. *This option should be used ONLY in consultation with the National Meteorological Service or PMO.* If a VOS ID is inserted, this ID will be used in the real time observation. The actual call sign will be stored in the Log file for climatological purposes. Format: any combination of upper case letters (A-Z) and numbers (0 - 9). No more than 6 characters are allowed.
  - **Recruiting Country:** Select United States. **Note:** this window will always be open.
  - **Waves Metadata:** In the TurboWin+ stand-alone version this will always be "wind seas and swell estimated".
  - **Wind Metadata:**
    - Select appropriate wind measuring scheme
    - Input Maximum height of Cargo above SLL in meters  
**\*\* THIS PERTAINS ONLY TO CONTAINER VESSELS \*\***  
**All other vessels enter 0 for cargo height.**
    - Input the difference between the SLL and actual Water line in meters  
**Positive ( + ) when the summer load line is above the water line, and negative ( - ) if below the water line.**
    - Input appropriate wind speed units
  - **Air Pressure Metadata:**
    - Input Barometer height above SLL in meters
    - Input distance of Keel to SLL in meters
    - Indicate pressure reading (Mean Sea Level) **yes** or no  
**\*\* U.S. VOS vessel barometers are adjusted to MEAN SEA LEVEL.**
  - **Temperature Metadata:**
    - Input type of Air Temp Exposure
    - Input type of Sea Water Temp Exposure

Once completed click Ok to save. This information will be saved in the TurboWin+ directory as "configuration.txt" file. Recommend e-mailing the configuration.txt file to the servicing PMO.

## E-MAIL SETTINGS

If an E-Mail client, such as Outlook, Outlook Express or Thunderbird is already installed and configured on the computer, TurboWin+ will use the E-Mail client automatically. If no E-Mail client exists, leave this section blank.

required for: Output --> Obs by E-mail (internet)

obs E-mail address recipient:

obs E-mail subject:

for: Maintenance --> Move log files by E-mail

logs email recipient:

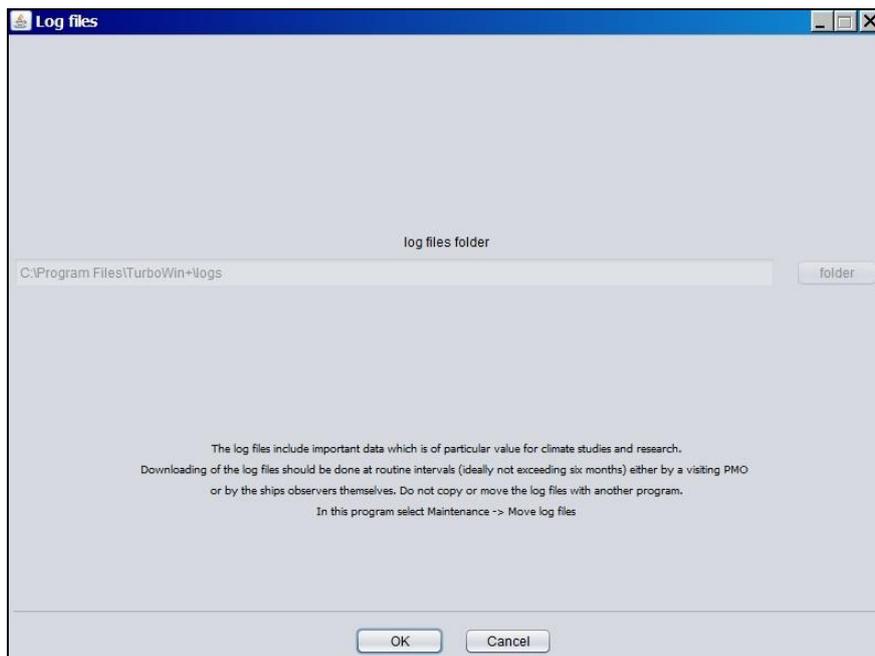
These log files include important data which is of particular value for climate studies  
Downloading of the log files should be done at routine intervals (ideally not exceeding six months)

OK Cancel

- **Required for Output--> Obs by E-Mail (internet)**
  - Input Obs E-Mail address recipient: **Shipobs@noaa.gov**
  - Input Obs E-Mail Subject: Weather Observation
- **For maintenance --> Move Log Files by E-Mail**
  - Input your servicing PMO E-Mail address

**Click OK to save** (TurboWin+ needs to be restarted for these changes to take effect.)

## LOG FILES SETTINGS



- This will automatically be filled in by TurboWin+. Verify that the Log File folder is correct. Should be C:\Program Files\TurboWin+\Logs or C:\Program Files (x86)\TurboWin+\Logs

Click Ok

## SERIAL CONNECTIONS SETTINGS



- Used for European Automated Weather Systems. In the stand-alone version ensure **None** is checked.

## OBSERVERS

The Observer software window displays a table with the following data:

surname	full initials*	rank	discharge book**
Smith	DES	2M	-
Jones	SGJ	3M	-
Cecl	MEC	Chief	-

Below the table, there are instructions and a legend:

- \*e.g. A.B.
- \*\*discharge book or seaman's card number, if applicable
- single click row to select observer ---
- double click cell to insert new data ---
- to clear table cells: double click appropriate cells and delete data ---

At the bottom of the window are buttons for Back, OK, Cancel, Help, and Stop.

- Several VOS recruiting countries use these names (and additional data) for their reward system. Please complete Surname, Full Initials and Rank to assist with identification of observers' for awards. Discharge book is optional. For more information check with your PMO.

## CAPTAIN

The Captain software window displays a table with the following data:

surname	full initials	date of joining	date of leaving	discharge book**
SMITH	SDS	01/01/2014	-	-
JONES	FGJ	06/02/2013	-	-

Below the table, there are input fields and an Add button:

surname:  full initials:  date of joining\*:  date of leaving\*:  discharge book\*\*:  Add

\* format: DD/MM/YYYY

\*\* optional information -discharge book or other id number e.g. a seaman's card if applicable

— to ensure consideration for national awards captains are encouraged to enter the above details correctly —  
 — It should be noted that these details may be collected by some meteorological services in order to verify award claims —

TurboWin

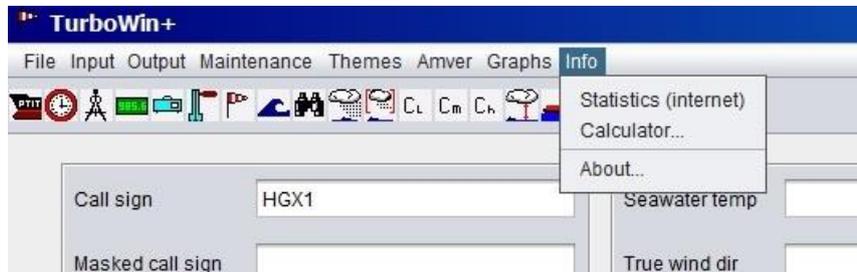
At the bottom of the window are buttons for OK, Cancel, and Help.

- As with Observers, Captain information is uses for identify individuals for awards. Please complete Surname, Full Initials and Date of Joining. Discharge book is optional. For more information check with your PMO.
- Required entries are Surname, Full Initials and Date of Joining.

## GRAPHS

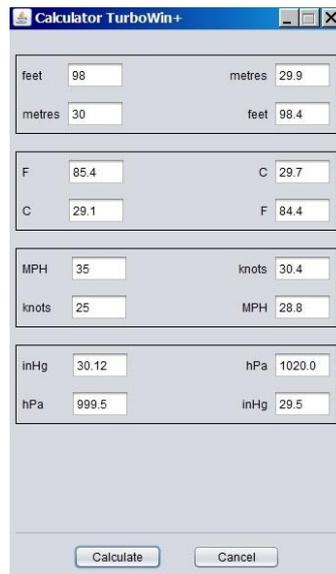
- Used for European Automated Weather Systems only.

## INFO



**Statistics (internet)** - For ships with an Internet connection, you can check the Quality Control of your observations. Clicking on **Statistics** will take you to the MetroFrance Marine Observation Monitoring web site. There you can view your QC on Pressure, Temperature, Wind Speed & Direction, Humidity, SST and Wave heights. Also available is a year by year breakdown of all observations received from your vessel since 2002.

**Calculator** - Simple met calculator



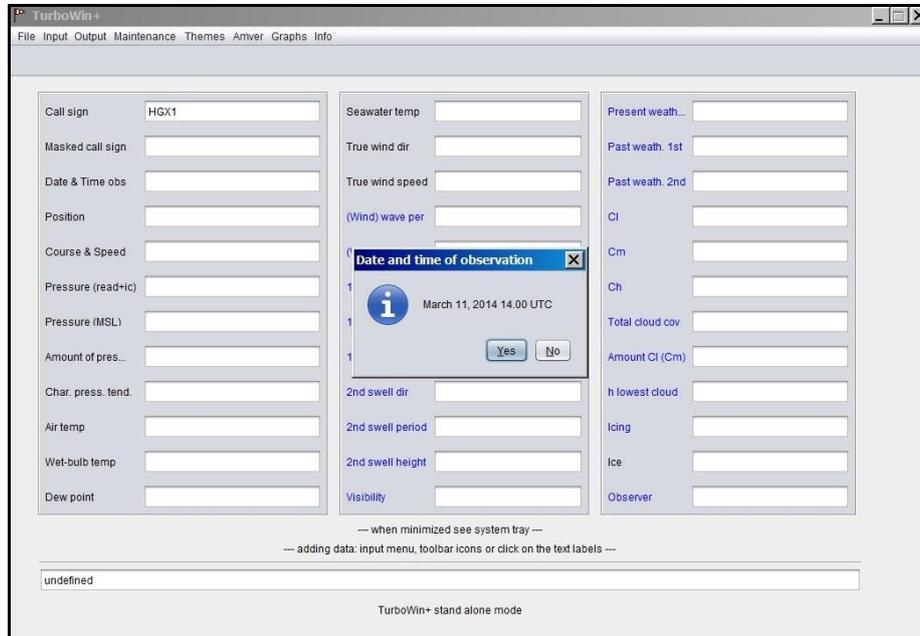
**About** - Displays the TurboWin+ version and a link to the KNMI TurboWin web site.

## HELP FILES

- A Help button is located at the bottom of each input screen. They are written in html and located on your computer C:\Program Files\Turbowin+\help
- An Internet connection is not required. Clicking the Help button will open up your web browser to view these files.

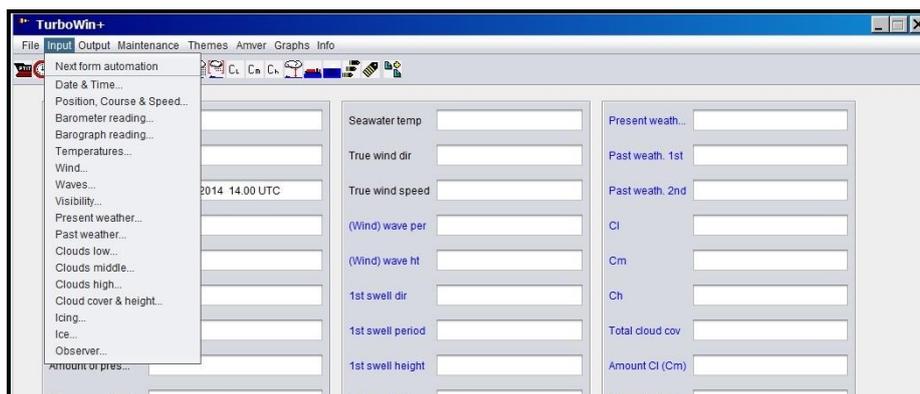
## STARTING TurboWin+

Click on the TurboWin+ desktop icon. The first screen to appear will ask you if the date and time of the observation is correct. If not correct click no, TurboWin+ will ask you to input the correct time (UTC) and date. **\*\*Ensure the UTC observation time is correct for the observation being recorded.**



## STARTING OBSERVATION

Select **INPUT – Next Form Automation**. Once an input screen is filled out, TurboWin+ will automatically go to the next input screen. Otherwise you will have to click on each individual input icon to move from screen to screen. You can also select the Next Form Automation icon



Individual Input Icons



## POSITION, COURSE AND SPEED

Position, course and speed

latitude

degrees minutes

45 20  North  
 South

longitude

degrees minutes

075 15  East  
 West

plot position on Google Maps (Internet)

course made good during last 3 hrs (degr)

stationary  
 023 - 067  203 - 247  
 068 - 112  248 - 292  
 113 - 157  293 - 337  
 158 - 202  338 - 022

speed made good during last 3 hrs (knots)

0  21 - 25  
 1 - 5  26 - 30  
 6 - 10  31 - 35  
 11 - 15  36 - 40  
 16 - 20  > 40

Back OK Cancel Help Stop

- If the ship has an Internet connection, clicking on plot position will display the ships position on Google map.

## BAROMETER READING

barometer reading

meta data (Maintenance --> Station data)

does the reading indicate Mean Sea Level pressure  yes  no

barometer reading (hPa) 1010.7 [860.0 - 1070.0]

instrument correction (ic)\*\* (hPa) 0 [-4.0 - 4.0]

current deepest draft (metres) [0.0 - 50.0]

\*\* e.g. from the instrument calibration correction card, this is NOT the height correction. you can always overwrite this value

Back OK Cancel Help Stop

- hPa to the nearest tenth.
- Input instrument correction only if barometer cannot be adjusted to Mean Sea Level. Check with your servicing PMO if an instrument correction is required. Otherwise input 0.0

## BAROGRAPH READING

- Only for ships outfitted with a marine barograph. Otherwise select “not determined”

## TEMPERATURES

- Degrees Celsius to the nearest tenth (0.1 °C)
- If the ship has more than one intake, use the one closest to the bow for SST.
- Care should be given when reporting SST. Used as a measurement for the stratification of temperature and humidity of the lower layers of maritime air masses. **Important !!**

## WIND

The screenshot shows a software window titled "Wind" with a blue header bar. Below the header, there is a "source (Maintenance --> Station data)" section with three radio button options:
 

- estimated; true speed and true direction
- measured; apparent speed and apparent direction (OFF THE BOW, clockwise)
- measured; true speed and true direction

 A central panel contains five input fields:
 

- wind dir. (degr) with value 180 and range [variable, calm, 1 - 360]
- wind speed (knots) with value 15 and range [0 - 200]
- ship's ground course (degr)\* with an empty field and range [stationary, 1 - 360]
- ship's ground speed (knots)\* with an empty field and range [0.0 - 50.0]
- ship's heading (degr)\*\* with an empty field and range [1 - 360]

 Below these fields are two explanatory lines:
 

- \* for the actual time of the wind observation
- \*\* insert only if heading differs from ground course

 At the bottom of the central panel are two more input fields:
 

- max. height deck cargo above summer load line (metres) with value 24 and range [0 - 100]
- difference between summer load line and water line (metres)\* with value -8 and range [-10 - 50]

 A note below these fields states: \*negative if summer load line is below water line. At the very bottom of the window are five buttons: Back, OK, Cancel, Help, and Stop.

- If your ship Wind Indicator measures **TRUE WIND SPEED AND DIRECTION**, input indicated wind speed and direction in the top two boxes.  
**\*\*\* Ship's ground course, ship's ground speed and the ship's heading at the time the wind reading was taken is optional, but requested for statistical and numerical modeling purposes. This additional information is important to our forecasting and climate models.**
- If your ship Wind Indicator measures **APPARENT WIND SPEED AND DIRECTION**, input ship's ground course, ship's ground speed and the ship's heading at the time the wind reading was taken. TurboWin+ will calculate the True Wind for the observation.
- **ESTIMATED TRUE WIND SPEED AND DIRECTION** will normally be based upon the visual appearance of the surface of the sea referenced by the Beaufort. See Observing Handbook No.1 for more information. Input estimated wind speed and direction in the top two boxes.  
**\*\*\* Ship's ground course, ship's ground speed and the ship's heading at the time the wind reading was taken is optional, but requested for statistical and numerical modeling purposes. This additional information is important to our forecasting and climate models.**
- For vessels participating in **VOSClm**, ship's ground course, ship's ground speed and ship's heading are **Mandatory** entries.

## WAVES

wind waves (sea)

period (sec) 4 [confused, 0 - 50]

height (metres) 2 [confused, 0.0 - 49.0]

swell system(s)

Swell not determined

No swell

Confused swell or indeterminable direction

One swell discernible

Two swells discernible

Bf	sea (metres)*
0	0.0
1	0.1
2	0.2
3	0.6
4	1.0
5	2.0
6	3.0
7	4.0
8	5.5
9	7.0
10	9.0
11	11.5
12	14.0

\* probable mean sea height in the open sea remote from land

meter	feet
1	3
2	7
3	10
4	13
5	16
6	20
7	23
8	26
9	30
10	33
11	36
12	40
13	43
14	46
15	50

- Input height is in meters. Conversion table for Meters to Feet located on right side of screen.
- Beaufort (Bf) wind scale located on left side of screen.

## SWELLS DISCERNABLE

1st swell system

direction (degr) 270 [1 - 360]

period (sec) 7 [1 - 50]

height (metres) 1 [0.5 - 49.0]

2nd swell system

direction (degr) [ ] [1 - 360]

period (sec) [ ] [1 - 50]

height (metres) [ ] [0.5 - 49.0]

meter	feet
1	3
2	7
3	10
4	13
5	16
6	20
7	23
8	26
9	30
10	33
11	36
12	40
13	43
14	46
15	50

- Report true direction in tenths of a degree from which the swell waves are coming from.
- Input height is in meters. Conversion table for Meters to Feet located on right side of screen.

## VISIBILITY

Visibility

< 50 metres     < 0.03 nm  
 50 - 200 metres     0.03 - 0.1 nm  
 200 - 500 metres     0.1 - 0.3 nm  
 500 - 1000 metres     0.3 - 0.5 nm  
 0.5 - 1.1 nm  
 1.1 - 2.2 nm  
 2.2 - 5.5 nm  
 5.5 - 11 nm  
 11 - 27 nm  
 > 27 nm  
 not determined

--- when the visibility is not uniform in all directions it should be estimated in the direction of least visibility ---

Back OK Cancel Help Stop

- If the reported visibility is below 5 nm, then you **must report** some type of present weather which is obscuring the visibility to 5 nm or less.
- When the visibility is not uniform in all directions it should be estimated in the direction of least visibility.

## PRESENT WEATHER

Present weather

no precipitation (DRY) at station at time of obs    general weather condition    precipitation (WET) at station at time of obs

not determined  
 thunder audible during the last 10 minutes  
 fog (or ice-fog) at time of obs  
 duststorm, sandstorm, drifting or blowing snow  
 precipitation, fog or thunderstorm within last hour; not at time of obs  
 squalls or funnel cloud(s) within last hour or at time of obs  
 lightning or precipitation within sight but not at station  
 shallow fog or mist  
**haze, dust, sand, smoke or blowing spray**  
 phenomena without significance

not determined  
 thunderstorm\* at time of obs  
 thunderstorm\* during preceding hour but not at time of obs  
 showery precipitation, no thunder at time of obs or during preceding hour  
 solid precipitation, not in showers  
 rain  
 drizzle

\*thunder heard; lightning may or may not be seen

specific weather condition

duststorm or sandstorm within sight at time of observation or during the preceding hour  
 blowing spray at the station  
 widespread dust in suspension in the air, not raised by wind, at time of observation  
**haze**  
 visibility reduced by smoke, e.g. industrial smoke, volcanic ash, forest fire

NOTE  
for all general and specific weather conditions: the topmost applicable weather condition shall be selected

present weather shall describe the weather at time of obs or (where specially mentioned) during the period of one hr immediately preceding it

Back OK Cancel Help Stop

- For more information on reporting Present Weather, refer to the Observing Handbook No. 1

## PAST WEATHER

**Past weather**

Past weather shall be selected in such way that Past weather and Present weather together give as complete a description as possible of the weather in the time interval concerned. For example if the type of weather undergoes a complete change during the time interval concerned, Past weather shall describe the weather prevailing before the type of weather indicated by Present weather

The period covered by Past weather shall be: Six hours for observations at 0000, 0600, 1200 1800 UTC; three hours for observations at 0300, 0900, 1500, 2100 UTC; one hour for observations at 0100, 0200, 0400, 0500, 0700, 0800, 1000, 1100, 1300, 1400, 1600, 1700, 1900, 2000, 2200, 2300 UTC

thunderstorm(s), with or without precipitation  
 shower(s)  
 snow, or rain and snow mixed  
 rain  
 drizzle  
 fog or ice fog or thick haze (visibility < 0.5 nm)  
 sandstorm, duststorm or blowing snow  
 sky covering > 0.5 throughout period  
 sky covering > 0.5 and <= 0.5 during parts of period  
 sky covering <= 0.5 throughout period

--- please check all applicable weather conditions ---

Back OK Cancel Help Stop

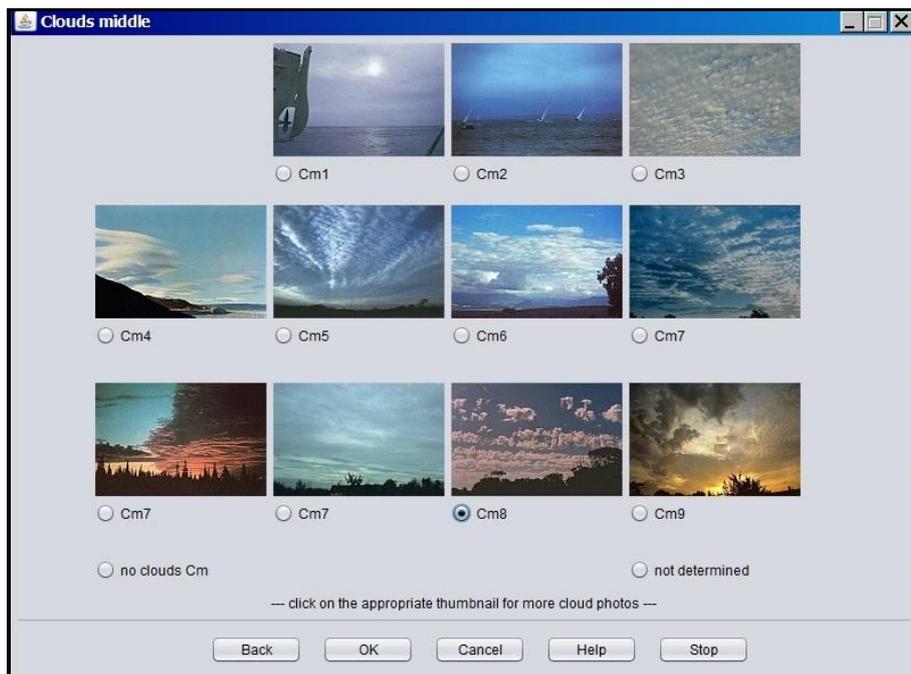
- For more information on reporting Past Weather, refer to the Observing Handbook No. 1

**CLOUDS – LOW****Height 0 – 6,500 FT 0 – 2 KM**

- If more than one type of Low Clouds are present, the order of priority for reporting is 9, 3, 4, 8, 2
- Type 1, 5, 6, 7 are of equal priority. If two or more are present, report the type with the greatest coverage.
- As a rough guide, heights of different types of Low Clouds may be expected to be between the following:  
**Low Clouds (CI)**
  - [Stratus](#): usually below 2,000 Ft (600 m) and sometimes nearly down to the surface.
  - [Cumulonimbus](#): 2,000 – 5,000 Ft (600 - 1500 m)
  - [Stratocumulus](#): 1,500 – 4,500 Ft (450 - 1350 m)
  - [Cumulus](#): 1,500 – 5,000 Ft (450 - 1500 m)
- These limits tend to be considerably higher in low latitudes.
- See Help file for detailed description of each Low Clouds.

## CLOUDS – MIDDLE

Height 6,500 - 23,000 FT 2 – 7 KM



- If more than one type of Middle Clouds are present, the order of priority for reporting is 9, 8, 7, 6, 5, 4, 3, 2, 1
- As a rough guide, heights of different types of Middle Clouds may be expected to be between the following:

### Middle Clouds (Cm)

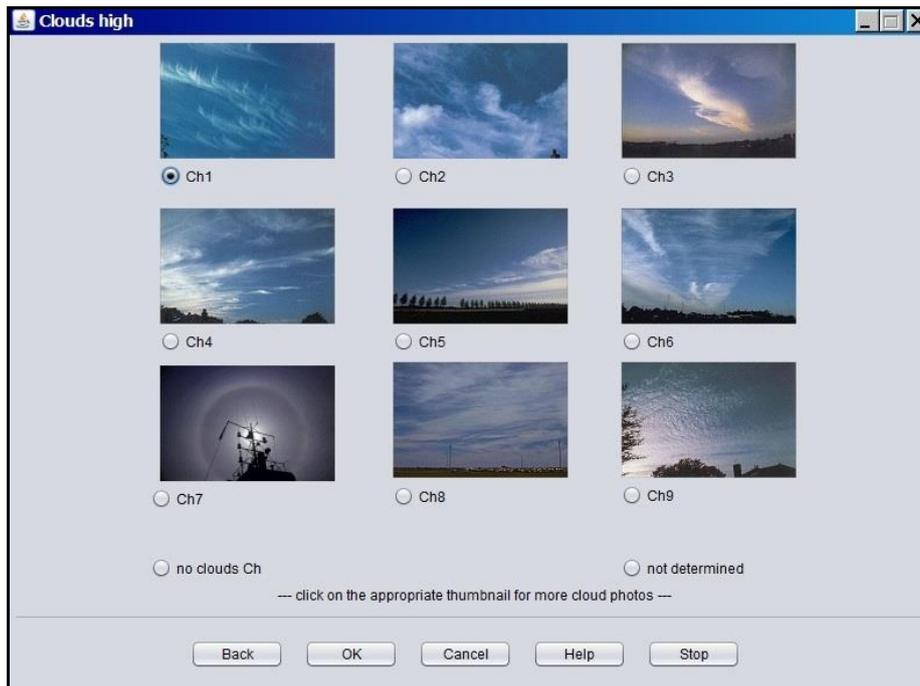
[Nimbostratus](#): 500 – 6,500 ft (150 - 2000 m)  
usually below 2,000 Ft (600 m) in moderate rain or snow.

[Altostratus](#) & [Altostratus](#): 6,500 – 23,000 Ft (2000 - 7000 m).

- These limits tend to be considerably higher in low latitudes.
- See Help file for detailed description of each Middle Clouds.

## CLOUDS – HIGH

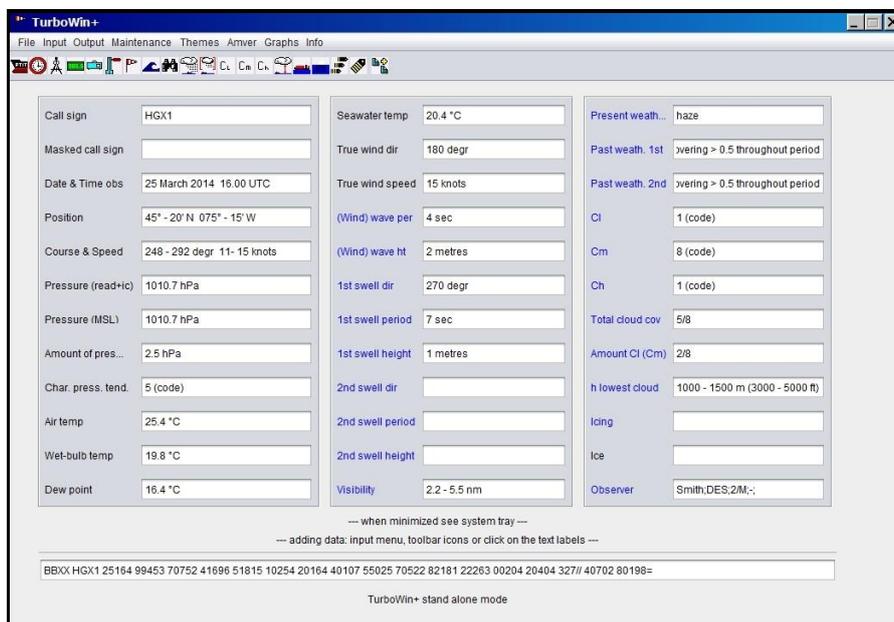
Height 16,000 – 50,000 FT 5 – 15 KM



- If more than one type of Middle Clouds are present, the order of priority for reporting is 9, 7, 8, 6, 5, 4, 3, 1, 2
- As a rough guide, heights of different types of High Clouds may be expected to be between the following:  
**High Clouds (Ch)**  
all usually above 16,000 Ft (5000 m)
- These limits tend to be considerably higher in low latitudes.
- See Help file for detailed description of each High Clouds.



Once the observation is complete, you will be returned to the main page.

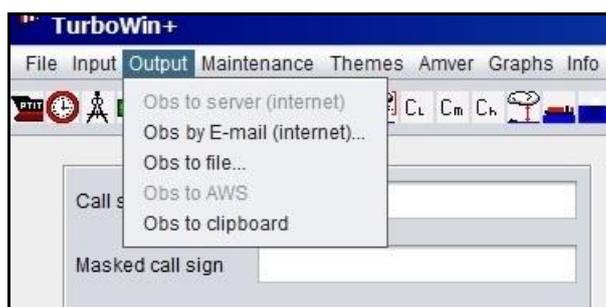


- Your coded BBXX message is shown at the bottom of the screen.
- If ICE is observed, click on Icing to open up Ice Reporting Screens.

## TRANSMITTING OBSERVATION

### E-MAIL

Click on OUTPUT – Obs by E-Mail (internet)

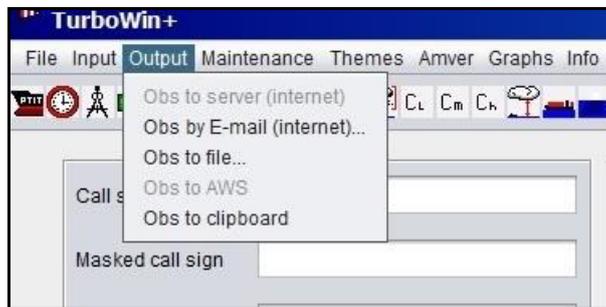


Your E-Mail system will open up with the observation in the body of the E-Mail. Please check the E-Mail address. Should be **Shipobs@noaa.gov**

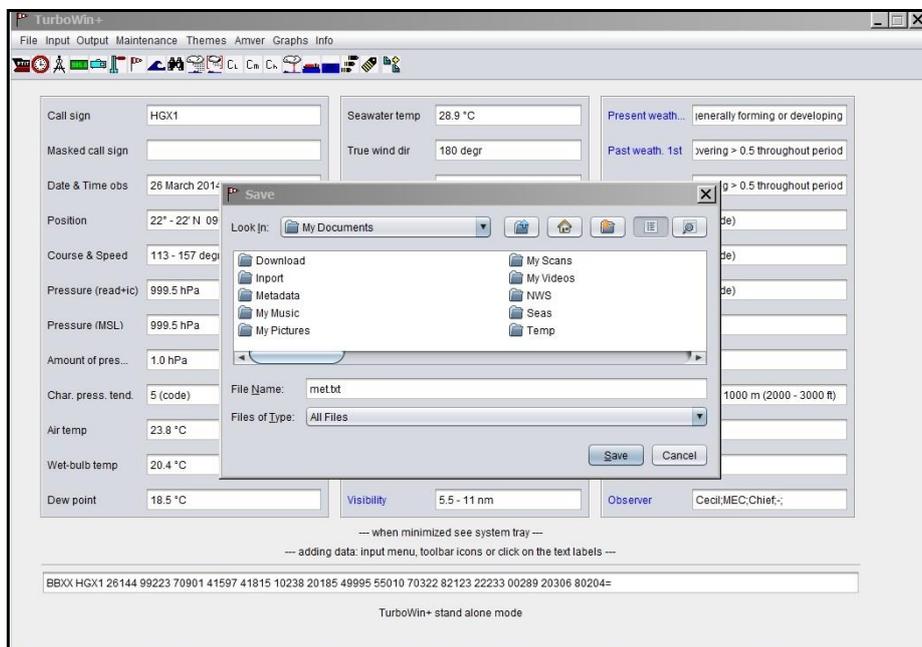
If correct, send E-Mail.

## INMARSAT C

To send the observation via Inmarsat C, click on OUTPUT - **Obs to File**



A Save dialog box will appear asking where you want the file to be saved and the file name.



- Save the observation on the appropriate media (Floppy Disk – USB Thumb drive – Hard Drive - SD Card) to transfer the coded observation to your Sat-C terminal.
- **\*\*** Recommend you always save the observation as **met.txt** in the same location each time. Do not rename the file. This way the old observation will be overwritten each time.
- The method of including the content of **met.txt** in a Sat-C message may vary between different makes of Inmarsat C terminals. If you have any questions, contact your servicing PMO.
- Follow your Sat-C instructions. Transmit the observation using Special Access Code (SAC) 41 to the appropriate LES.
- Your servicing PMO will provide Sat-C Code 41 transmission instructions.

## Inmarsat-C Land Earth Stations (LES) accepting Code 41 messages

SATELLITE	SAC	OPERATOR	STATION NAME	LES ID
AOR-E	41	Vizada	Southbury	104
AOR-W	41	Vizada	Southbury	004
IOR	41	Vizada	Eik (Oslo)	304
POR	41	Vizada	Santa Paula	204

**Note:** Vizada Satellite Communications, the primary provider of satellite communications for the U.S. VOS program has upgraded their system to expedite communication traffic flow. As with most technological advances, some older systems become less productive. In order to ensure expedited routing, all communication normally transmitted to any x01 series ID should be directed to the upgraded x04 series IDs. While the x01 series IDs will continue to process any communication traffic received, transmission delays will become more and more likely. Therefore, it is imperative that everyone start switching their INMARSAT addresses over to the X04 Series for marine weather observation reporting.

### AFTER THE OBSERVATION IS TRANSMITTED

- After transmitting the observation, it's not necessary to close TurboWin+. All parameters will be automatically reset. You can either minimize TurboWin+ or close (exit) the program.
- If TurboWin+ is minimized, you will see the TurboWin+ icon in the system tray (  ). Right click on the icon to maximize or exit TurboWin+.

### LOG FILES

TurboWin+ Log Files consist of:

IMMT.txt	International Marine Meteorological Tape (Observational data)
Captian.txt	Captains names, initials and dates
Observer.txt	Observers names, initials and dates

#### IMMT

All observations taken are archived in a special WMO International Marine Meteorological Tape (IMMT) format. Observations are appended sequentially into the IMMT file and augmented with extra groups containing additional observational parameters, quality control checks, and specific ship characteristics. This information is of particular value for climate studies and research.

At least every 3 months, ideally not exceeding 6 months, the TurboWin+ Log Files should be downloaded by the servicing PMO, or by the ship's observer when requested. They are then sent to the National Climatic Data Center (NCDC) for initial processing, and then forwarded to the WMO Marine Climate Centers located in the United Kingdom and Germany.

#### Maintenance

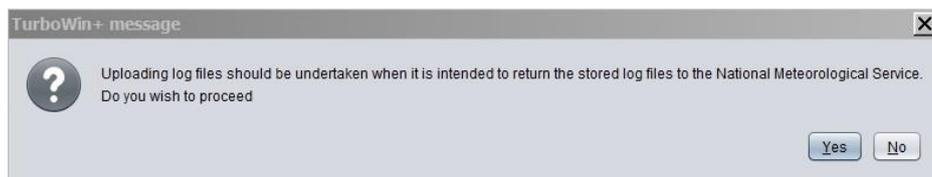
Maintenance is accomplished in two ways, (1) by the servicing PMO who will download the Log Files to a floppy or USB Thumb drive, or (2) by ships personnel when requested, E-mailing the Log Files to the PMO.



### E-Mailing Log Files by Ship’s Personnel

When it’s not feasible for the PMO to visit the ship within a 6 month period, the PMO will request ship’s personnel to E-Mail the Log Files.

- On Main page, select **Maintenance**
- Select **Move Log Files by E-Mail**. A dialog box will open up asking if you want to proceed. If so click Yes.



- Your E-Mail system will open up with the following statement in the body of the E-Mail;

“please manually **ATTACH** the file: C:\Program Files\TurboWin+\logs\temp\Ship Name logs.zip”

<b>From:</b>	OCEAN CRESCENT <master.WDF4929@globeemail.com>
<b>To:</b>	Steve.Jones@noaa.gov (your servicing PMO)
<b>Subj:</b>	meteo logs OCEAN CRESCENT
<p>please attach manually the file: C:\Program Files\TurboWin+\logs\temp\OCEAN CRESCENT logs.zip</p>	

- E-Mail address, should be your servicing PMO.
- **ATTACH** the zip file and send E-Mail. The Zip file can be found in  
**C:\Program Files\TurboWin+\logs\temp\**

After maintenance is performed, the IMMT file on the computer will be deleted. A new IMMT.txt file will be created once a new ob is taken.

## AMVER REPORTS



### IMO Standard for Amver Reporting

AMVER/\_R//  
A/Vessel Name/International Radio Call Sign/IMO Number//  
B/Time (as of position in C or G)//  
C/Latitude/Longitude (as of time in B)//  
E/Current Course (as of time in B)//  
F/Estimated Average Speed (for remainder of voyage)//  
G/Port of Departure/Latitude/Longitude//  
I/Destination/Latitude/Longitude/Estimated Time of Arrival//  
K/Port of Arrival/Latitude/Longitude/Time of Arrival//  
L/Navigation Method/Leg Speed/Latitude/Longitude/Port/ETA/ETD//  
M/Coastal Radio Station or Satellite Number/Next Radio Station//  
V/Medical Personnel//  
X/Remarks//  
Y/Relay Instructions//  
Z/End of Report (EOR)//

**Note:** Vessel IMO Number is now required at the end of Line A

## TRANSMITTING AMVER Reports

### E-MAIL

- E-Mail is the preferred method for sending Amver Reports
- Once the AMVER Report is filled out, click E-Mail on the bottom of the screen. Your E-Mail will open up with the report in the body of the E-Mail.
- Please check the E-Mail address. Should be [amvermsg@amver.org](mailto:amvermsg@amver.org)
- If correct, send E-Mail.

### INMARSAT-C

- Once the AMVER Report is completed, click **Clipboard**. This will save the report in the proper text format.
- Open Notepad on the computer and **paste** the report.
- Save the report on the appropriate media (Floppy Disk – USB Thumb drive – SD Card) to transfer the AMVER report to your Sat-C terminal.
- Method of including the content of a text formatted AMVER Report in a Sat-C message may vary between different makes of Inmarsat C terminals. If you have any questions, contact your servicing PMO.
- Follow your Sat-C instructions. Transmit the observation using Special Access Code (SAC) **43** to the appropriate LES.
- Your servicing PMO will provide Sat-C Code 43 transmission instructions.

### For Information or Questions regarding AMVER, please contact:

United States Coast Guard  
Amver Maritime Relations Office  
USCG Battery Park Building  
1 South Street, 2nd FL  
New York, NY 10004-1499 U.S.A.

Phone: 212- 668-7764  
Fax: 212- 668-7684  
E-Mail: [benjamin.m.strong@uscg.mil](mailto:benjamin.m.strong@uscg.mil)

## SAILING PLAN (SP)

This report contains the complete routing information and should be sent within a few hours before departure, upon departure, or within a few hours after departure. It must contain enough information to predict the vessel's actual position within 25 nautical miles at any time during the voyage, assuming the Sailing Plan is followed exactly. Sailing Plans require A, B, E, F, G, I, L, and Z lines. The M, V, X, and Y lines are optional. (The Y line is required for U.S. vessels.)

### Example :

```

AMVER/SP//
A/NWS HOUSTON/HGX1/1234567//
B/242212Z MAR//
E/045//
F/198//
G/TOKYO/3536N/13946E//
I/LOS ANGELES/3343N/11817W/031300Z APR//
L/RL/198/3448N/13954E/240850Z//
L/GC/210/4200N/18000E/280400Z//
L/RL/200/4200N/16000W/300030Z//
L/GC/188/3422N/12047W/030500Z//
L/RL//
M/43778910//
V/PA//
X/TEST SAIL PLAN//
Y/JASREP/AUSREP/CHILREP/MAREP//
Z/EOR//

```

**E-Mail** Opens ships E-Mail with the AMVER Sail Plan in body of E-Mail.

**Clipboard** Saves Sail Plan to the Clipboard in text format.

**Cancel** Cancels Sail Plan. Return to main menu.

**Import** For ships on regular recurring routes, saved Sail Plans can be imported and edited.

**Save** Saves the Sail Plan to the default location C:/Program Files/TurboWin+/AMVER.

## POSITION REPORT (PR)

This report should be sent within 24 hours of departing port and at least once every 48 hours thereafter. The destination should be included (at least in the first few reports) in case Amver has not received the Sailing Plan information. Position Reports require A, B, C, E, F, and Z lines. The I line is strongly recommended. The M, X, and Y lines are optional. (The Y line is required for U.S. vessels.)

**\*\* If you submit a marine weather observation at least once per day, you DO NOT have to submit a Position Report (PR).**

The screenshot shows the 'Amver Position Report' window. It has a blue title bar and a light gray background. The form is organized into sections: 'vessel' with fields for name, call sign, and IMO number; 'time of position [UTC]' with fields for day, hour, minute, and month; 'current position' with latitude and longitude fields; 'current course' with a degree field; 'speed (remainder voyage)' with a speed field; 'destination\*' with port, latitude, and longitude fields; and 'ETA destination [UTC]\*' with day, hour, minute, and month fields. Below these are 'radio guard\*' and 'relay\*' sections with checkboxes for JASREP, AUSREP, CHILREP, and MAREP. A 'Remarks\*' text area is at the bottom. At the very bottom are buttons for 'E-mail', 'Clipboard', 'Cancel', and 'Import', along with a link to the 'AMVER web site' and a note: '\* optional' and '-- only import saved Sailing Plans --'.

### Example:

```
AMVER/PR//  
A/NWS HOUSTON/HGX1/1234567//  
B/010112Z DEC//  
C/3500N/13523W//  
E/120//  
F/161//  
I/LOS ANGELES/3343N/12047W/032310Z DEC//  
Y/JASREP/AUSREP/CHILREP/MAREP//  
Z/EOR//
```

**E-Mail** Opens ships E-Mail with the AMVER Position Report in body of E-Mail.

**Clipboard** Saves Position Report to the Clipboard in text format.

**Cancel** Cancels Position Report. Return to main menu.

**Import** Position Reports cannot be saved or imported.

## DEVIATION REPORT (DR)

This report should be sent as soon as any voyage information changes which could affect Amver's ability to accurately predict the vessel's position. Changes in course or speed due to weather, ice, change in destination, diverting to evacuate a sick or injured crewmember, diverting to assist another vessel, or any other deviation from the original Sailing Plan should be reported as soon as possible. Deviation Reports require the A, B, C, E, F, and Z lines. The I and L lines are required if destination or route changes. The I line is always strongly recommended, even when not required. The M, X, and Y lines are optional. (The Y line is required for U.S. vessels.)

### Example:

```
AMVER/DR//
A/NWS HOUSTON/HGX1/1234567//
B/291200Z NOV//
C/4200N/16654W//
E/090//
F/175//
I/LOS ANGELES/3343N/12047W/041000Z DEC//
M/43691167//
X/REDUCED SPEED DUE TO WEATHER//
Y/JASREP/AUSREP/CHILREP/MAREP//
Z/EOR//
```

- E-Mail** Opens ships E-Mail with the AMVER Deviation Report in body of E-Mail.
- Clipboard** Saves Deviation Report to the Clipboard in text format.
- Cancel** Cancels Deviation Report. Return to main menu.
- Import** Deviation Reports cannot be saved or imported.

## FINAL ARRIVAL REPORT (FR)

This report should be sent upon arrival at the port of destination. This report properly terminates the voyage in Amver's computer, ensures the vessel will not appear on an Amver SURPIC until its next voyage, and allows the number of days on plot to be correctly updated. Final Arrival Reports require the A, K, and Z lines. The X and Y lines are optional. (The Y line is required for U.S. vessels.)

Amver Arrival Report

vessel name: NWS HOUSTON call sign: HGX1 IMO number: 1234567

destination port: LOS ANGELES lat [dd-mm N/S]: 33-43 N lon [ddd-mm W/E]: 129-47 W

arrived [UTC] day: 03 [01-31] hour: 22 [00-23] minute: 00 [00-59] month: DEC [3 letters]

relay\*  JASREP  AUSREP  CHILREP  MAREP

Remarks\*

\* optional [AMVER web site](#) E-mail Clipboard Cancel Import --- only import saved Sailing Plans ---

### Example:

```
AMVER/FR//  
A/NWS HOUSTON/HGX1/1234567//  
K/LOS ANGELES/3343N/12047W/032200Z DEC//  
Y/JASREP/AUSREP/CHILREP/MAREP//  
Z/EOR//
```

**E-Mail** Opens ships E-Mail with the AMVER Arrival Report in body of E-Mail.

**Clipboard** Saves Arrival Report to the Clipboard in text format.

**Cancel** Cancels Arrival Report. Return to main menu.

**Import** Arrival Reports cannot be saved or imported.

## JAVA Install

Java 7 or higher (JRE 7, 32bit or 64bit) **must be** installed on the computer for TurboWin+ to run properly.

**Note:** JAVA 8 will not operate on a Windows XP operating system.

On a Windows computer check the drive TurboWin+ will be installed, normally the C: / drive. If Java 7 or higher is installed you can find it under: C:/Program Files/JAVA/JRE7 JRE means (Java Runtime Environment).

If older versions of JAVA exist, it's best to remove them first before installing JAVA7. See JAVA removal instructions.

PMOs should have the offline JAVA 7 or higher install software on the TurboWin+ CD or in a Thumb Drive, in case it has to be installed.

To get the latest version, go to the JAVA website <http://www.java.com/en/download/manual.jsp>

Download the **Windows Offline** file. This will cover most end-users, and contains everything required to run Java applications on a computer system. The offline Java file can be installed without an internet connection.

The latest JAVA Windows Offline software will be on the TurboWin+ installation CD.

- Double-click on the Java 7 setup to start the installation process.
- The installation process starts. Click the **Install** button to accept the license terms and to continue with the installation.



Oracle has partnered with companies that offer various products. The installer may present you with option to install these programs. PMOs should deny all third party installs. Click the **Next** button to continue the installation.



- A few brief dialogs confirm the last steps of the installation process; click **Close** on the last dialog. This will complete Java installation process.



# UNINSTALLING

## TurboWin 5.0, TurboWin+, Java

Applies to: Windows 8, Windows 7, Vista, Windows XP

You can uninstall TurboWin 5.0, TurboWin+ or older versions of Java manually in the same way as you would uninstall any other software from your Windows computer.

Older versions of Java may appear in the program list as **J2SE, JRE6, Java 2, Java SE or Java Runtime Environment**.

### ***Windows 8 - Uninstall Programs***

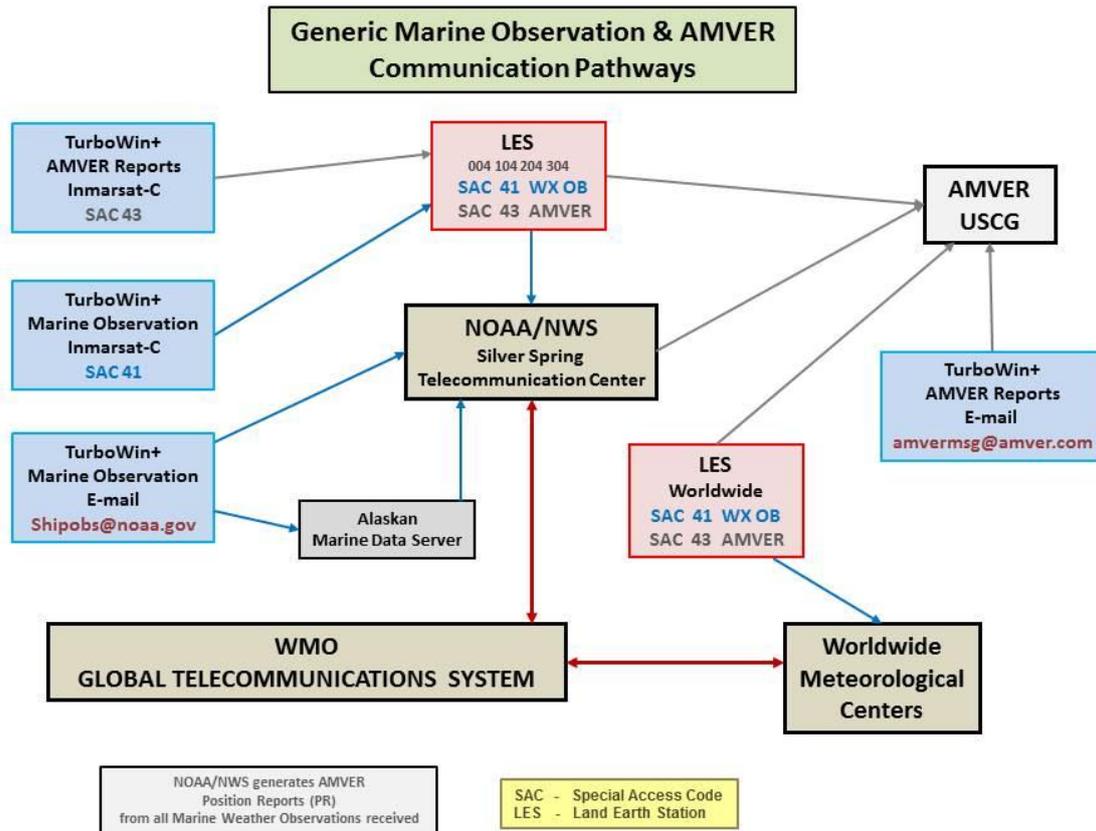
1. Right-click on the screen at bottom-left corner and choose the **Control Panel** from the pop-up menu.
2. When the Control Panel appears, choose **Uninstall a Program** from the Programs category.
3. Select the program to uninstall and then click its **Uninstall** button.
4. Click **Yes** to confirm the program uninstall.

### ***Windows 7 and Vista - Uninstall Programs***

1. Click **Start**
2. Select **Control Panel**
3. Select **Programs**
4. Click **Programs and Features**
5. Select the program you want to uninstall by clicking on it, and then click the **Uninstall** button.  
*For Windows 7 users you may need administrator privileges to remove programs.*

### ***Windows XP - Uninstall Programs***

1. Click **Start**
2. Select **Control Panel**
3. Click the **Add/Remove Programs** control panel icon
4. The Add/Remove control panel displays a list of software on the system, including any Java software products that are on the computer. Select the TurboWin program or any old versions of JAVA that you want to uninstall by clicking on it, and then click the **Remove** button.



Ships' observations are generally made at the standard synoptic hours of 0000, 0600, 1200 and 1800 UTC and are sent to a meteorological service as by INMARSAT-C or email communication. In the case of INMARSAT-C, the cost of transmission is paid by the meteorological service of the receiving country. Observations at the intermediate reporting times of 0300, 0900, 1500 and 2100 UTC are also highly encouraged, and observers are urged to report at any UTC hour if they missed the standard or intermediate reporting times, or if weather conditions varied markedly from the forecast.

The oceans cover about two-thirds of the surface of the earth, and for decades ships were the only means of obtaining meteorological data from them. Although there are now several other means - satellites, drifting buoys, floats and radar - **ships still play a very important part**. They provide **ground truth** for the calibration of satellite observations and make measurements not yet obtainable by other means, such as air temperature and dew point.

Meteorological data are required from the seas and oceans for a number of purposes:

- For global computer models in analyzing and forecasting the state of the atmosphere;
- For the preparation of marine forecasts and warnings;
- For the preparation of forecasts and warnings for offshore industries;
- To monitor the state of the oceans using delayed-mode data in weekly and monthly analyses;
- For climatological data banks for many purposes, e.g. design of ships and structures at sea, determination of economic shipping routes; and
- To build long-term records to monitor changes in the climate of the earth.