AMVERSEAS AUTO IMET

Installation Manual for NOAA Vessels Using SCS and Internet

June, 2010

SEAS

NOTE: An in-depth help manual for the entire AUTOIMET utilities is found in the HELP tab of the AMVER/SEAS program. This particular Manual will be *specific* for the NOAA Vessels who utilize the SCS for data collection and have 24/7 internet capabilities.

The latest AMVERSEAS version for AUTOIMET will need to be downloaded from an FTP site.

This guide has been produced for the use of the PMO and the ship's ET/IT, but it needs to be noted that the majority of the duties on installation will be the responsibility of the ET/IT on the ship due to administrative rights on the NOAA Ships computer/server/SCS. The PMO should be familiar with the setup as to assist the ET/IT with this process. The PMO's should also have enough working knowledge to assist the NOAA Corps officers in trouble shooting and/or general quality assurance. As a guideline for a timeline, this entire process of setting up a NOAA Ship with SEAS AutoIMET should take about two hours.

PM Rychtar

Table of Contents

Introduction	3
Communications	4
Requirements	5
Time Setup	6
Installing AmverSEAS w/AutoIMET	11
Setting up AutoIMET	19
Setting up Transmission	19
Setting up Transmission Type	21
6	22
Starting the AutoIMET Logger	23
Starting the Time Server	26
Starting the NOAA SEAS Iridium Mailer Service	29
Setting up AutoIMET Datasource and Transmission Type	38
SCS Template Setup	43
Message Configuration	44
Message Builder	47
Editing, removing or moving components	89
Trouble Shooting	90

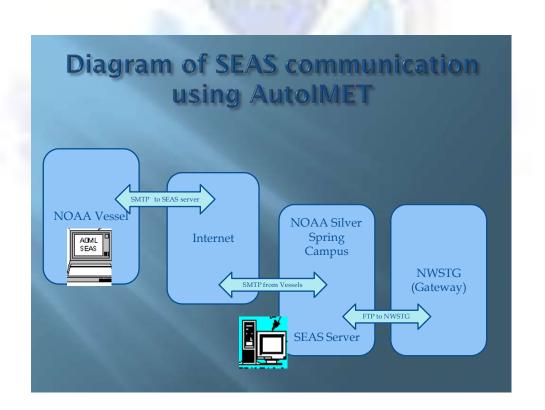
Introduction to the AUTOIMET Program for VOS

- The AutoIMET program collects data from automated weather sources once every 3 minutes, and then the data is transmitted on a user determined schedule; typically this is hourly. Instantaneous data received closest to the transmit time is transmitted.
- The AutoIMET program is enabled, setup and started from the AMVER/SEAS <u>'MET | Automated | Auto IMET Logger ->Start'</u> menu. It can also start automatically when Amver/SEAS is started if it was previously enabled. For SCS systems using Email (NOAA Vessels), the AutoIMET can run independently of AmverSeas if so desired.
- This program automatically transmits the MET data using the Meteorological Observation (BBXX) format.
- AutoIMET has the ability to be augmented. It also gives the observer the ability to toggle on/off any sensor that appears to be erroneous or suspect.

Communications:

-<u>SMTP using ship internet</u>. (NOAA Vessels) It will be necessary to set up and install the Mailer for transmitting the Met Observations. The link to the Mail Service originates in the *Auto IMET program* (*not* in AMVERSEAS main program). Thus when using ship internet, AMVERSEAS does not need to be operating.

NOTE: While Iridium is the *name* of this Mailer Service, this service is an SMTP service that can configure an internet connection via Iridium modem or LAN connection.



Requirements:

Computer Hardware requirements:

Operating System - Windows 2000, Windows NT, Windows 98, Windows 95. Works best with 200 MHz Pentium or better Video card that supports 800 x 600 pixels with 65K colors or better. 10 MB of free hard disk space

(These are the same requirements as for any previous installation of AMVERSEAS)

Meteorological data collection requirements:

SCS (scientific computer system)

R M Young programmable translator model 26-800*

SEAS with updated AUTOIMET

Communications requirements:

24/7 internet capabilities

*This new programmable translator enables the process of obtaining the Sea Level Pressure to be read to the hundredth, rather than the tenth, thus giving a more accurate reading after applying the height correction. It also provides the ability to obtain derived data such as wet bulb and dew point for a complete marine observation.

Time Setup

For proper operation of AMVER/SEAS, the computer time and time zone must be set correctly to (GMT) Casablanca Monrovia time. Once the computer time zone is set correctly, it should not be changed. If the time zone changes the (GMT) Casablanca Monrovia time is not affected, so do not do anything.



The procedure for setting the time and time zone is to select the 'Start' button on the lower left corner of your computer screen as shown above.

werPoint	Control Panel
	- AT
	Set Program Access and Defaults
28	Connect To
	Printers and Faxes
	(2) Help and Support
	🔎 Search
	7 Run

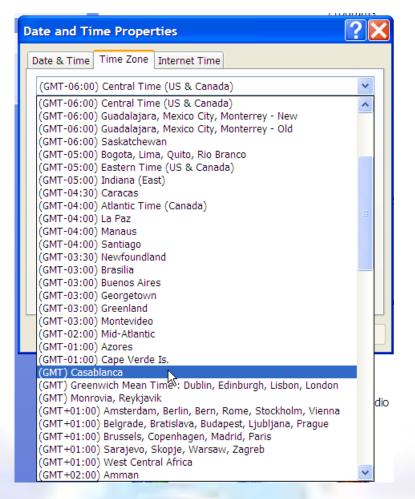
From there, scroll up to the right and select "Control Panel" as shown above.

Edit View Favorites To	ols Help					1
) Back 🔹 🕥 🔹 🏂 🔎	Search 彦 Folders	•				
tress 📴 Control Panel					~	→ (
Control Panel	Accessibility Options	Xdd Hardware	Mdd or Remov	Administrative Tools	Automatic Updates	
See Also	Broadcom Control Sui	Configuration Manager	Date and Set t	he date, time, a	and time zone for	you
❷ Help and Support	Fonts	Game Controllers	Intel(R) GMA Driver for	F Internal NIC Configuration	Internet Options	
	Java	JInitiator 1.3.1.17	Jinitiator 1.3.1.18	JInitiator 1.3.1.22	达 Keyboard	
	Mail	Mouse	Network Connections	Phone and Modem	Power Options	

When the Control Panel window opens up double click on the "Date and Time".

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Date &	Tim	е ті	ime j	۲one	Int	ernet	Time
Date		_	l	15			
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7	8	9	10	11	12	13	
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21	22	23	24	25	26	27	
28	29	30					
							10:34:10 AM 🗘
_							
Curren	t tim	ie zoi	ne:	Centi	ral D	ayligh	it Time
					[OK Cancel Apply

Once you are at the Date and Time Properties, choose "Time Zone" and double click.



From there select 'Time Zone' tab. Now select (GMT) Casablanca Monrovia time zone from pull down list.



Once this time zone has been selected, click the 'Apply' button. The date and time shown, should be correct for (GMT) Casablanca Monrovia time. This may be different from your local time.

Note: Do Not select Greenwich Mean Time: Dublin ... because it uses daylight savings time which causes Amver Seas problems.







Exit out as above...



Step 1: Downloading the Current SEAS with AutoIMET

Acquiring the newest version via FTP will most likely be the normal way of obtaining the AutoIMET.

Go to: <u>ftp://ftp.aoml.noaa.gov/phod/pub/seas/Users/PaulaR</u>

To view FTP site in Windows Explorer, click "page" and then open the FTP site.

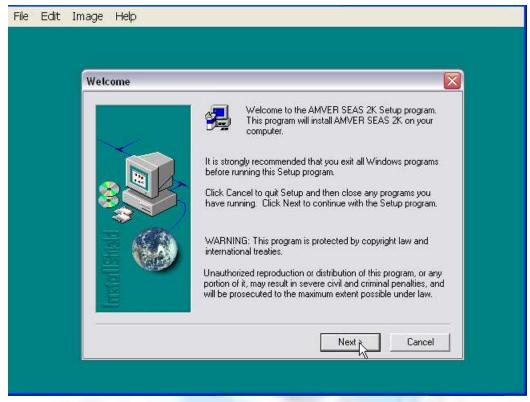
Go to the file named ndbc_scs_build.exe

After retrieving the file, save it to the desktop. Once you save it, then hit "run". It is fully executable.



This will start the loading of the AMVERSEAS.....

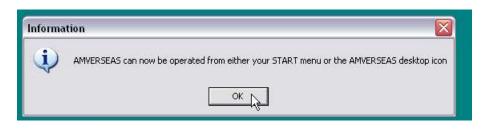
Click on "next" as shown



Again, Click on "next" as shown ...

Choose Destination	
	Setup will install AMVER SEAS 2K in the following folder.
	To install to this folder, click Next.
	To install to a different folder, click Browse and select another folder.
8	You can choose not to install AMVER SEAS 2K by clicking Cancel to exit Setup.
	Destination Folder
	C:\Program Files\AMVERSEAS BIOWSe

Click "OK".....



Click "OK".....

formation		
icon in th	to operate AMVERSEAS properly, please read the AMVERSEAS_help file. This file can be viewed by double clic ie START menu under Programs AMVERSEAS.	king on the AMVERSEA_help
	OKN	

You now have the AMVERSEAS ICON on your desktop....

Double click on the ICON to begin the setup for AUTOIMET



*Reminder....even though you will not be transmitting the Administrative Message with Ships information, you must fill out the data in the Administrative message before the software will allow you to proceed. Fill out the Administrative message with the ships particulars and save it in the default location. An example follows....

	Administration File not found	
	Press "OK"	
AmverS	stration eas can not be proceed without completing the A ion. Please fill out Administration information or ex OK	
dministration	Press "OK"	
Ship Information Company Name	Call Sign*	Maximum Speed Knots*
Name* Sensor Information Thermometer Height Anemometer Height Barometer Height	Number Sea Surface Temp Type Wet Bulb Temp Method Anemometer Method	Navigation Method
Sea Surface Temp Depth INMARSAT Data INMARSAT-C Mobile ID* Emergency Watch (GMDSS) INMARSAT-C Mobile ID INMARSAT-A Number	Medical Staff *	ne

Proceed to fill out as much information as possible.

ministrat	ion						
: Transmit	Help						
Ship Inform	ation					A 49 YO 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
Company Name	NOAA		Call Sign*	WTEO	Maximum Speed Knots*	11	
Ship Name*	GORDO	N GUNTER		IMO Number	8835255	Sail Plan Default Navigation Method	0
Sensor Info	ormation	meters					floppy drive
		e Temp Type	intake measu	rement 💌	A		
Anemometer Height 14.0 Wet Bulb T		emp Method measured			1 <u></u>		
Barometer I	10122200	10.6	Anemomet	er Method	measured	•	
Sea Surfac Temp Dept		4.0					
INMARSAT	T-C Mobile		430396610		<mark>cal Staff *</mark> Nurse IT M PA I ⊽ N		IM Participant
Emergency INMARSA1				Forw.		arep Transmit	
INMARSA1	T-A Numbe	er [lasrep	Transmit Binar	Cancel
							* Mandatory

Click on....Transmit Binary....as shown above.

dministration le Transmit Help			
Ship Information Company Name NDAA		Call Sign* WTED	Maximum Speed 11 Knots* 11
Ship Name* GORDON	Save File for	Number 10033233	Navigation Method
Thermometer Height Anemometer Height Barometer Height Sea Surface Temp Depth	14.0 To save and sele	e for later transmssion. e on floppy, insert diskette in fl sct 'Floppy'. Select 'Browse' to location y	loppy drive o save file
INMARSAT Data	in the second of	Medical Staff *	to your left and save this
INMARSAT-C Mobile		Forward F AmVer F M Jasrep	Marep Transmit Cancel Binary * Mandatory

Ship Informat	ion					
Company Name	NOAA		Call Sign*	WTEO	Maximum Speed Knots*	11
Ship Name*	GORDON GUNT	ER	IMO Number	8835255	Sail Plan Default Navigation Method	C0 💌
Sensor Inform	nation meter	8				floppy drive
Thermomete	Save As				? 🛛	A 💌
Anemometer	Save in: 🌔	Reports_Amver		•	৳ 💣 📰 •	21 1
Barometer H Sea Surface						
Barometer H Sea Surface Temp Depth						
Barometer H Sea Surface Temp Depth INMARSAT (IM Participant
Barometer H Sea Surface Temp Depth INMARSAT I INMARSAT- Emergency V INMARSAT-						IM Participant

Click on "SAVE"

Company	Maximum Sneed	
Name	Contact Information	\mathbf{X}
Ship Name*	C:\Program Files\AMVERSEAS\Reports_Amver\Admin.bin	-
Sensor	This file must be sent in 8 bit binary using special access code "SEAS",	y drive
Thermo	to one of the following coast earth stations.	•
Anemor	COMSAT USA, SOUTHBURY, AOR-E (104) COMSAT USA, SANTAPAULA, POR (204)	
Barome Sea Su	Eik, Oslo (304) COMSAT USA, SOUTHBURY, AOR-W (004)	
Temp D	Please DO NOT attempt to view this file with any editor in	
INMAR:	order to avoid file corruption.	
INMAR	OK Print	ipant
Emergen	cy watch (dimitions)	

Click on "OK"

You have successfully downloaded the AMVERSEAS with AutoIMET.

AutoIMET is embedded and the following pages will walk you through the entire set up.





Setting up AutoIMET.

Setting up Transmissions...

AMVER SEAS	Setup Utility Help		
sail dev p	Amver Administration Report		-
A STOREMENTERS	Setup AmverSeas Configurations 🔹 🕨	Setup All - Enable/Disable	
NORR	Transmission Type	MET Only	,
	Time Server -> Start	XBT Hand Launch XBT Auto Launch	
Water Constant of Carl		TSG	DNSE
		AutoIMET	•
	Other SEAS Reports Enable/Disable	in 18 20:00,	

At the setup menu, scroll down to the Enable/Disable Functions as shown above.

Amver SEAS		
 Enable to Show menu items. Disable to Hide menu items Display Setup Menus. Obviously only hide menus after setup. Display Amver Reports: Sail, Dev, Pos and Arrival Reports Display Buttons for Amver Reports Display Utility Menu Hide the disabled "Display" menu items (else items are grayed) PassWord protect this Enable/Disable dialog. PC Watch Dog Timer: - ENABLED 	Programs that are enabled, are accessable Disabled Programs are grayed out and hid TimeServer (Tray Program Time Server: - ENABLED Allow remote sources of GPS da XBT XBT: - ENABLED XBT HandLaunching Only Config XBT Bare Basics, Hand Launch non-used menus and hides them	den if 'Hide' is) Startup ta Startup guration Only: Disables
Enable Transmission and GPS Types Thrane: - ENABLED Txmit, GP: Startup XverXface Display Thrane Xmt Button on AmverSeas menu Indium: - ENABLED Txmit, GP: Set Iridium Com Port Email: - ENABLED Txmit Change Email Directory	TSG Data Reader: - ENABLED TSG Data Transmitter: - ENABLED Auto IMET Automated Weather: - ENABLED SCS socket connection to MET data (NOAA Ships)	Startup Startup Xr Startup Startup

This will be the menu that you will see. You will need to check off certain blocks to enable transmission properly.

Enable/Disable AmverSeas Menu Items	×
Amver SEAS Enable to Show menu items. Disable to Hide menu items Display Setup Menus. Obviously only hide menus after setup. Display Amver Reports: Sail, Dev, Pos and Arrival Reports Display Buttons for Amver Reports Display Utility Menu Hide the disabled "Display" menu items (else items are grayed) PassWord protect this Enable/Disable dialog. PC Watch Dog Timer: - ENABLED	Programs that are enabled, are accessable on menu. Disabled Programs are grayed out and hidden if 'Hide' is TimeServer (Tray Program) ✓ Time Server: - ENABLED ✓ Allow remote sources of GPS data XBT XBT: - ENABLED XBT HandLaunching Only Configuration XBT Bare Basics, Hand Launch Only: Disables non-used menus and hides them.
Enable Transmission and GPS Types Thrane: - ENABLED Txmit, GP! Startup XverXface Display Thrane Xmt Button on AmverSeas menu Iridium: - ENABLED Txmit, GP! Set Iridium Com Port Email: - ENABLED Txmit Change Email Directory Default Setup Startups only work if corresponding function is enabled.	TSG TSG Data Reader: · ENABLED Startup TSG Data Transmitter: · ENABLED Startup Xmit Auto IMET Automated Weather: · ENABLED Startup SCS socket connection to MET data (NOAA Ships) OK Cancel

Be sure to check off all boxes as shown above.

	mver SEAS		
	ms. Disable to Hide menu items	Programs that are enabled, are accessa Disabled Programs are grayed out and I	
Display Setup Menus.	Obviously only hide menus after setup.	TimeServer (Tray Progr	am)
Display Amver Report:	s: Sail, Dev, Pos and Arrival Reports	Time Server: - ENABLED	Startup
Display Buttor Emai	Directory for email tranmissi	on of files 🛛 🔀	lata
E Davidered and	se Select Email Transmit Directory	Browse	Startup
PC Watch Do C:\F	bath name) Program Files\AMVERSEAS\Iridium\que		n Only: Disables n.
PC Watch Do C:VF Enat Thrane: - ENA	Program Files\AMVERSEAS\Iridium\que		n Only: Disables m.
Enat	rogram Files\AMVERSEAS\Iridium\que	eue	n Only: Disables n.

Under the "enable transmitting and GPS Types", click on "change Email Directory". Be Sure the path reads as above:

 $\label{eq:c:Program Files} AMVERSEAS \ lidium \ queue$

Click "OK"

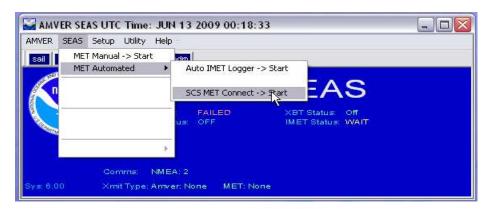
Setting up Transmission Type

Back at the AMVERSEAS Menu, go to "SETUP" Scroll down to "Transmission Type"



In the second column, check the "EmailXmit (NOAA Fleet), this enables the function of MET Transmission. Click "OK"

Starting the SCS Socket



As shown above at the AMVERSEAS menu, go to ...

SEAS, MET Automated, SCS MET Connect - > Start



This starts the SCS socket which collects data from the SCS Message. Socket program will appear in the bottom right of PC display in the system tray as a green box (as shown above). The numbers are displaying seconds. It is updated every 3-4 secs. Once the green box is visible, right click on it (the green box in system tray) and set the SCS socket address and the SCS IP address. Please use exact format for IP address 3 number (with leading 0's if need be)

for each section of IP address.



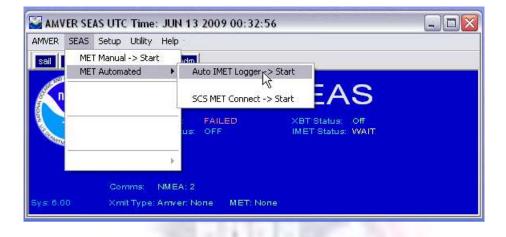
This is how it appears when you right click on the green box. Choose SCS Socket Address.

Only Administrator should cl	hange these values!
	Format: nnn.nnn.nnn.nnn
SCS computer IP	010.048.007.014
SCS computer Socket	1991
	Cancel

Type in the IP address for the SCS computer. Be sure to use the EXACT format for the IP address...3 numbers for each section of the IP address. Click "OK". (*above IP and Socket are particular to NOAA GORDON GUNTER.)

Starting the Auto IMET Logger

Go back to the AMVERSEAS Menu.



At the AMVER SEAS, at the SEAS menu, scroll down to MET Automated, Auto IMET Logger - > Start as shown above.

AMVER SEAS UT	AUTO IMET Configure And Start 🛛 🛛 🔀	
ANVER SEAS Setup sail dev pos a	Data for Archive Maximum height of deck cargo	
	C WH01 Com Port	
Co	🕫 SCS (via	

Data for Archive (if you have the data). DATA SOURCE , highlight SCS as shown in the example above. Click "OK/START".

AFTER you click OK/Start, the Auto IMET Logger should appear as shown on the following page.

y4	1	4 4	tup Utilit	d Approxim	4				
	St	ail dev pos	arrv	met a	dm				
	8	NORA	A	M	VE	R S	FA	S	
1819) 100	and the second		1	S Status			BT Status:		
		Company of Contraction		ane Stat			ET Status:		
Auto IME	F Logger - Data	Source: SC	S · Xmis	ion: Dl	SARLED				
ile Setup L		i source. sc.	, Anis	sion. Di	JADLLU	-			
Auto IMETSta	a service and a service se				Re	ead IMET 0:04	mins		
	s: See AmverSea	8							
Transmit	DISABLED				1	Time Po	osition		
Auto IMET I Barometric	Data mbar			- mm	Time SCS	update:			
Pressure	I	PRC Level	OFF	Г	06/13/2	2009 00:41:01			
Barometer Height	10.6 m 1014		OFF	- W/m^2	Lat	28 15.38 N			
Relative	%	mbar SWR	OFF	i-		087 26.74 W			
Humidity	J JY			- m/s	Lon	007 26.74 W			
Air Temp	033.2 deg0	∕ We	OFF	Г	Ship Speed	0.0	knts		
Wet	022.2	Wn	OFF	Г		242.0	datas		
Dew Point	16.9	Wind Spd	27	- knts	Ship Dir	1	degs		
32 24				degs	True Wind	Speed, Dir			
Sea Temp	27.6	Wind Dir	237.36	V	True Wind 9	Speed 2.7	- knts		
	n						NEIG		
- Raw Data I	0.00 40.00 00 OF	CAD 07 44500 0	0.7.242			237.36			
2009/06/1	3,00:40:39,28,25 013.62,053,033.2				True Wind D	201.00	degs		

NOTE:

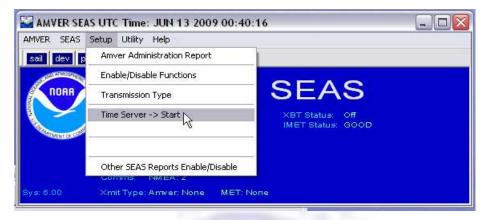
The AutoIMET Logger shows the data being collected, their values, raw data in the raw format (lower left hand corner) as well as the Status. This is where you can toggle any element off by unchecking the box, if you suspect erroneous data.

<mark>S</mark> nu_v4	AMVER SEAS UT	Utility Help -			
	sail dev pos ar	rv met ac	m		
7	A CONTRACTOR OF THE OWNER				
	NORA	AM	VER	SEAS	
anding) A =	No.	GPS Status:	FAILED	XBT Status: Off	
		Thrane Statu		IMET Status: GOOL	>
2	MENT OF				
🔛 Auto IMET Logger-	Data Source: SCS ; 3	Xmission: DIS	ABLED		
File Setup Utilities Help)				
Data and Transmis				THE REAL PROPERTY AND A DESCRIPTION OF A	
Au SCS Program	 Socket Addre Start -> SCS 	1.5.5.5	Read IMET	0:14 mins	
Archive Status: See Amve Transmit DISABLE	alleas	and a second sec		1	
Auto IMET Data	0			Time Position	
Barometric	mbar PRC OF	mm	Time SCS update:		
Devenator	Level	111-00	06/13/2009 00:4	1:48	
Height 10.6 m	1014.88 LWR OF Flux		Lat 28 15.3	38 N	
Relative 053	% ^{mbar} SWR OF	F F	. 087.26	75W	
rianiaity -	degC we Of	m/s	Lon J		
AirTemp U33.2			Ship Speed	knts	
Wet 022.3	Vn Of	1	Ship Dir 243.0	degs	
Dew Point 17.1	Wind Spd 2.	67 knts			
Sea Temp 27.6			True Wind Speed, D		
	✓ Wind Dir 23	5.33	True Wind Speed	.67 knts	
Raw Data In		1			
	8.25635,-87.44582,00.7,)33.2,27.6,2.67,235.33,0		True Wind Dir	35.33 degs	
			00000000000000000000000000000000000000	0.000000	

Once at the AutoIMET Logger, go to the Setup menu, scroll to "SCS Program", then down to "Start - > SCS Socket

This will start or enable the SCS Socket. The logger will close.

Starting the Time Server



As shown above, go to the menu, choose "Setup", then scroll down to "Time Server -> Start".

e Setup Help				
Send - Se	et Up Configuration to T	ime Server	Exit TimeServer stays up.	
Setun Info not uet	updated by Time Serve	arl	Archive Data	
- Select: Primary S	ource of Data for Time VerXface	Server	Source Used by Time Server	
enable			Same Source 00:00:00	
NMEA	m Port Baud N	PRMC 💌 GPGLL 💌		
Iridium Serial:	19200 🗾 🛛	PRMC 🚽 < Time/Pos/Sp	d/Crs	
Other Comms: Ta	indT: 🛐 TSG: 🗌	AOMLXBT U	pdate Com Info	
Source	Time	V Position	V Spd/Crs V Ra	IW
T and T				
<		111		(iii)
· · · · ·		ng dividers can be resized with		

The Time Position Server will pop up as shown above. This needs to be set up as well. Be sure that the Primary Source of Data for Time Server is clicked and enabled as shown above. The XverXface or AutoIMET should be checked as well as the ON block below as shown in the example above.

e Setup H	elp	
Data Si Good: Valid d 06 13 2009 00 Select: Prima	resses / Remote View ource Info ata TandT SENT into AmverSeas 0 45 37 28 15 36 N 087 26 80 W ary Source of Data for Time Server • XverXface or AutoIMET	Exit TimeServer stays up. Archive Data Source Used by Time Server XverXface Thrane
Serial Comm		Same Source 00:04:26
NMEA Iridium Serial: Other Comms:	19200 - GPRMC - Time/Pos/Spd	SPRMC GPRMC Crs idate Com Info
Iridium Serial:	19200 - GPRMC - K Time/Pos/Spd	/Crs
Iridium Serial: Other Comms:	13200 - GPRMC - < Time/Pos/Spd	/Crs ndate Com Info V Spd/Crs V Raw

As shown in the above example, go to "Setup", scroll down to "IP Addresses/Remote View. Here you will need to set up the IP address for the TSG and the remote Time Server.

e Setup Help	
Send - Set Up Configuration to Time Server Good: Valid data TandT SENT into AmverSeas 06 13 2009 00 46 25 28 15 36 N 087 26 81 W	Exit TimeServer stays up.
Select: Primary Source of I NMEA • XverXface or AutoIM enable ON • ON Serial Comm Setup: Comm Port NMEA 2 4 Iridium Serial: 1 Other Comms: TandT: 3	outer:
reconstruction discourse effective discourse	vsition V Spd/Crs V Raw v15 36 N 087 26 81 W T 000 245 T 06 13 2009 00 46 25 28 15 36 N 08
<	

The IP address on the computer will most likely be "Dynamic" rather than "Static". In the case for a "Dynamic IP Address", simply input a "." (period) into both the IP address of this computer and the IP address of computer with Remote Time Server. As shown in the above example. Click "OK".

e Setup Help	
Send - Set Up Configuration to Time Server	Exit (
Good: Valid data TandT SENT into AmverSeas	TimeServer stays up.
06 13 2009 00 47 07 28 15 36 N 087 26 82 W	Archive Data
Select: Primary Source of Data for Time Server	Source Used by Time Server
C NMEA C XverXface C Remote C Ir or AutoIMET C Time Srvr	idium C Alternate XverXface Thrane
enable ON FON FON FON	C ON Same Source 00:05:53
Serial Comm Setup:	
Comm Port Baud NMEA Time NMEA 2 4800 GPRMC Iridium Serial: 19200 GPRMC	NMEA Position NMEA Spd/Crs NMEA Raw GPGLL GRRMC GPRMC < Time/Pos/Spd/Crs
	GPGLL GPRMC GP
NMEA 2 4800 GPRMC Iridium Serial: 19200 GPRMC Other Comms: TandT: 3 TSG: ADML	GPGLL GPRMC GP
NMEA 2 4800 GPRMC Iridium Serial: 19200 GPRMC Other Comms: TandT: 3 TSG: ADML Source Time V F	GPGLL GPRMC GPRMC <- Time/Pos/Spd/Crs XBT Update Com Info

Good Valid Data should be indicated soon after clicking "OK".

How to install and setup the SMTP mailer service.

(Once installed this service will restart automatically on reboot.)

How to install and setup the SMTP mailer service. While Iridium is the name of this Mailer Service, this service is an SMTP service that can configure an internet connection via Iridium modem or LAN connection. Insure that the Iridium.exe is found in the path shown on the DOS window. Most likely this path will be "C:\Program Files\AMVERSEAS". If not, you can navigate to here in the DOS window, use windows explorer to copy "iridium.exe" to the "C:\" directory and execute from there. The command to be typed into the DOS window is:

Transmitting using Computer Internet Connection: "iridium.exe -i -lan"

*NOTE: Executing this command installs the e-mailer as a Windows service. The command will create the directory path "C:\Program\ Files\amverseas\iridium\bin" and copy the executable to that location.

Please be sure that you see:

"C:\program\files\amverseas\iridium\bin\iridium.exe". If not run "iridium -u" to uninstall and then reinstall by retyping the command "iridium.exe -i -lan" as specified above.

	Printers and Faxes
	 Help and Support Search
All Programs 👂	7 Run
	Log Off 🔟 Shut Dov
start 📐 🔛 AMVERSI	EAS AU 🖙 Removable Disk

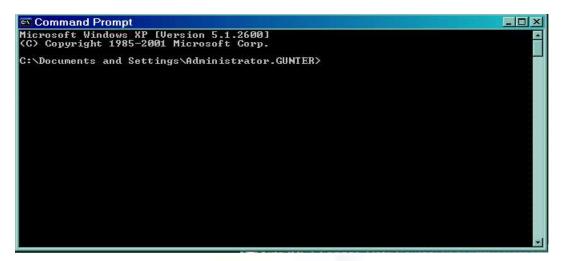
You will need to open to a command prompt. Go to "start" as shown above.

🧭 My Documents
My Pictures
💋 My Music
Favorites +
My Computer
My Network Places
Control Panel
Set Program Access and Defaults
Printers and Faxes
Help and Support
Search
777 Run
HP Opens a program, folder,
💋 Log Off 🛛 🗿 Shut Down

.....then move your mouse to the right column of commands to "RUN" as shown above.

Run		?
	Type the name of a program, folder, document, Internet resource, and Windows will open it for	
Open:	Ind	¥

Type "cmd" and click "OK" This will get you to a Command Prompt.



Above is an example of a command prompt.



Type after the command prompt> cd c:\program files\amverseas HIT RETURN

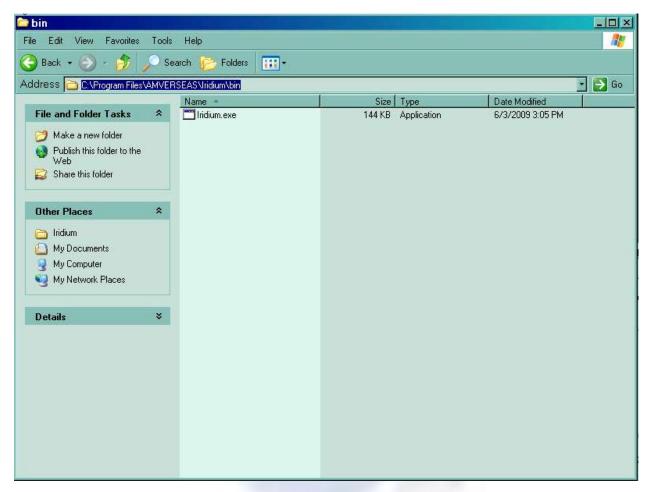


As shown above, >iridium.exe -I -lan HIT RETURN

This is how the iridium.exe path should look in the Command Prompt

NOTE: This is worthy of repeating....Executing this command installs the e-mailer as a Windows service. The command will create the directory path "C:\Program Files\amverseas\iridium\bin" and copy the executable to that location. Please be sure that you see "C:\program

files\amverseas\iridium\bin\iridium.exe". If not run "iridium -u" to uninstall and then reinstall by retyping the command "iridium.exe -i -lan" as specified above.



Directory Path is Correct as shown above

Launch the Control Panel and open Administrative Tools/Services. This will start the service "NOAA Iridium Mailer"

E-mail Outlook Express AMVERSEAS Internet Explorer Command Prompt SCSMenu_v4	 My Documents My Recent Documents My Pictures My Music Favorites My Computer My Network Places
Notepad	Control Panel Set Progr Defaults Printers at Printers
All Programs 🔸	HP Support

As the example shows above, double click on "Control Panel"

Control Panel e Edit View Fav	vorites Tools Help			
) Bevolu 🔹 🍙 📼 🖡	🇊 🔊 Search 🥡	Folders		1
	20 M 4	Todoro []		
Idress 🕞 Control Pa	anel			🗾 💽 G
-	Name	A PROPERTY AND A PROP		
Control Panel			your computer	
and the second second second	2000 C C C C C C C C C C C C C C C C C C		and troublesh	
Switch to Categor			priremove pro	
		and a second design of the second sec	.re administrat	
Call And Call States			Windows to a	
See Also	- J Da		date, time, a	
Mindows Update			a the appeara	
🐻 Help and Support			ize the displa	
S their and coppen		2 CONTRACTOR STREET	hange, and m	
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			the graphics	
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			M) Control Pa size your keyb	
	D Ma		ize your keyb	
			sts to other co	
			re your telep	
		CONTRACTOR CONTRA	ite energy-sa	
			installed print	
			es HP Protect	
			HD Audio C	
			ize settings fo	
			move, and co.	
			ule computer t	
	Changed and the second s		our current se	
			s the sound s	
	💕 Sp		s settings for t	
	Se Sy		ormation abo	

At Control Panel, as shown above, double click on "Administrative Tools"

) Back 🔹 🐑 - 👧 🞾 Se dress 🙀 Administrative Tools	earch 😥 Folders 🛄 🖌			
	Name -	Size	Туре	Date Modified
File and Folder Tasks * Image: State of the state o	Component Services Computer Management Data Sources (ODBC) desktop.ini Event Viewer Docal Security Policy Microsoft.NET Framework 1.1 Microsoft.NET Framework 1.1	2 KB 2 KB 2 KB 2 KB 2 KB 2 KB 2 KB 2 KB	Shortcut Shortcut Configuration Settings Shortcut Shortcut Shortcut Shortcut Shortcut	4/25/2006 5:26 PM 4/11/2008 2:03 AM 4/25/2006 5:32 PM 4/25/2006 5:32 PM 4/25/2006 5:32 PM 4/25/2006 5:32 PM 4/25/2006 5:32 PM 4/2/2007 10:49 PM 4/22/2007 10:49 PM
Other Places * Control Panel My Documents My Computer My Network Places	Bervice 2	2КВ	Shortcut	6/3/2008 7:30 PM
Details 🛛 🗧				

As shown above, double click on "Services"

		Charles		Local System
	Provides M	Started	Automatic	Local System
🎇 McAfee Task Manager	Allows sch	Started	Automatic	Local System
🎇 McAfee Validation T	Provides v	Started	Automatic	Local System
🎇 Messenger	Transmits		Disabled	Local System
🆓 MS Software Shado	Manages s		Manual	Local System
🎇 Net Logon	Supports p		Manual	Local System
🎇 Net. Tcp Port Sharin	Provides a		Disabled	Local Service
🎇 NetMeeting Remot	Enables an		Manual	Local System
🆓 Network Access Pr	Allows win		Manual	Local System
🎇 Network Connections	Manages o	Started	Manual	Local System
🆓 Network DDE	Provides n		Disabled	Local System
🆓 Network DDE DSDM	Manages D		Disabled	Local System
🆓 Network Location A	Collects an	Started	Manual	Local System
🆓 Network Provisionin	Manages X		Manual	Local System
🦚 NOAA SEAS Mailer	Ν	Started	Automatic	Local System
🦓 NT LM Security Sup	Provides s		Manual	Local System
Performance Logs	Callects pe		Manual	Network S

As shown above double click on "NOAA SEAS Mailer"

	NOAA SEAS Iridium Mailer Properties (Local Comp ? ×
	General Log On Recovery Dependencies
	Service name: NOAA SEAS Iridium Mailer
	Display name: NDAA SEAS Iridium Mailer
lote: the name NOAA SEAS idium Mailer was changed. is now called NOAA SEAS	Description:
AILER.	Path to executable:
	c:\Program Files\AMVERSEAS\Iridium\bin\Iridium.exe
	Startup type: Manual
	Service status: Stopped
	Start Stop Pause Resume
	You can specify the start parameters that apply when you start the service from here.
	OK Cancel Apply

This is the Iridium Mailer and the Properties. At the arrow you can see where it is on "Manual"....this needs to be changed to Automatic.

Service name:	NOAA SEAS Iridium Mailer
Display name:	NDAA SEAS Iridium Mailer
Description:	Ξ
Path to executat	ble:
c:\Program Files	\AMVERSEAS\Iridium\bin\Iridium.exe
Startup type:	Automatic
Manup (ype.	
Service status:	Stopped
Start	Stop Pause Resume
You can specify	the start parameters that apply when you start the service
rom here.	
5 G (A)	
Start parameters	

Change the Start up type to Automatic and click "start". You should see the Service Status change from Stopped to Started within a few seconds.

NOAA SEAS Ir	idium Mailer Properties (Local Comp 🔋 🗙
General Log On	Recovery Dependencies
Service name:	NDAA SEAS Iridium Mailer
Display name:	NOAA SEAS Iridium Mailer
Description:	
Path to executab	ile:
c:\Program Files	VAMVERSEAS\Iridium\bin\Iridium.exe
Startup type:	Automatic
Service status:	Started
Start	Stop Pause Resume
You can specify from here. Start parameters:	the start parameters that apply when you start the service
	Cancel Apply

The Iridium Mailer, on Automatic, Started....click "OK"

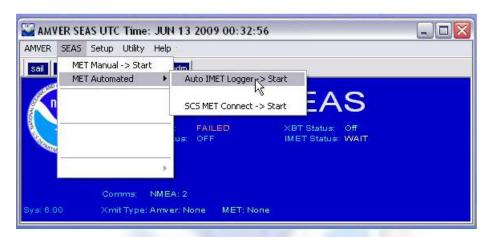
The Iridium Mailer Service will now monitor the directory "C:\program files\amverseas\iridium\queue" once per minute and send any deliverable files through e-mail.

NOTE: If the call does not complete, a retry will occur 6 minutes after the initial try and if there is another failure a retry will occur 11 minutes after the first retry. If the second retry fails, there will be a 12 hour wait before another attempt unless the service is restarted.

In order stop this service go into "Administrative Tools | Services" and double click on service to stop service. This will need to be done if the "AmverSeas" folder is moved or renamed. Please restart service when ready.

Setting up AutoIMET Data Source and Transmission Type

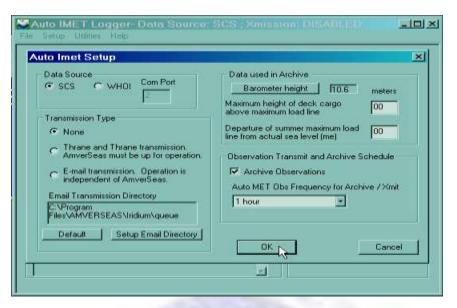
After the Mail Service has been started start the AutoIMET Logger as shown below.



AutoIMET Logger will pop up, in the LOGGER Menu, click on "Setup", then scroll down and double click on "Data and Transmission"

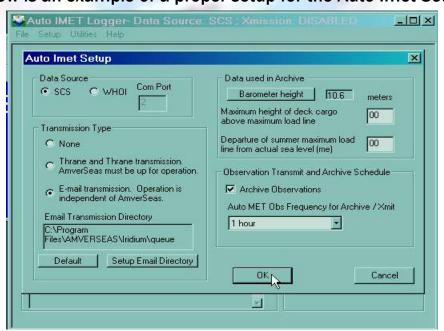
	and Transr Program	nission	-			Re	ad IMET 0:26	mins
Archive Statu	s: See An	nverSeas						
Transmit	DISABI	LED					Time P	osition
Auto IMET I Barometric	Data	– mbar		18 -	- 7070	Time SCS t	ipdate:	
Pressure		V	PRC Level	OFF		06/13/2	009 14:24:29	
Barometer Height	10.6 m		LWR Flux	OFF	- W/m^2	Lat	28 18.30 N	
Relative Humidity	064	- % mb 	swR	OFF		Lon	087 31.39 W	
Air Temp	030.6	- degC _ I⊄	We	OFF		Ship Speed	00.5	knts
Wet	023.1		Wn	OFF		Ship Dir	079	degs
Dew Point	19.8]	Wind Spd	5.36	- knts	- True Wind 9	Speed Dir	augu
Sea Temp	28,4		Wind Dir	228.37	- degs	True Wind S	And a state of the	- knts
- Raw Data I	n						5.	
			-87.52322,00 4,5.36,228.3		25	True Wind D	228.37	- degs

Now you will need to set up the Auto IMET Data Source and Transmission Type.



The Auto IMET Setup screen will pop up...

Data Source should be SCS, Transmission Type should be E-mail Transmission. Double check Email Transmission Directory for correct path. Data used in Archive...barometer height should be placed here along with other requested data if known. Observation Transmit and Archive Schedule. Archive should be checked and Auto MET Obs Frequency for Archive/ Xmit should be picked. 1 hour is usually the normal frequency. Click "OK".



Below is an example of a proper setup for the Auto Imet Setup.

Click '	"OK"	as	shown	above
---------	------	----	-------	-------

12.9000	Auto IMET Logger- Data Source SCS : Xmission: E-mail	
ER	Auto IMET Status: Good Read IMET 0.10 mins Archive Status: See AnverSeas Transmit DISABLED Auto IMET Data Barometric mbar PRC OFF mm Pressure PRC OFF M D6/13/2009 14:26:47	
	aBuoyLogger ansmission type changed. If AmverSeas is in use, please shut down and resart this program and AmverS	eas.
	Dew Point 19.6 Wind Spd 4.42 knts Sea Temp 28.3 Wind Dir 226.33 True Wind Speed, Dir Raw Data In 2009/06/13.14:26:31.28.30508.87.52297.00.4.076, Inclusion 1016.18.060.032.1.28.3.4.42,226.33.023.4.025. True Wind Dir 226.33	

At this point, Click "OK" and shut down.

.0	atus: Goo						ead IMET 0	:26 mins
Archive Statu Fransmit	s: UN - wa ON - wa	2017 I					Tire	e Position -
Auto IMET I	Data						1 10	erosidori
Barometric Pressure		mbar V	PRC Level	OFF	- mm	- (° <u>**</u>		
Barometer Height	10.6 m	1017.51	LWR Flux	OFF	- W/m^2	Lat	_	
Relative Humidity	059	.% mb	ar SWR	OFF		Lon		
Air Temp	031.9	degC I	We	OFF	— m/s	Ship Spee	d 00.4	knts
Wet	022.7		Wn	OFF		Ship Dir	069	deas
Dew Point	18.5		Wind Spd	5.13	- knts	16	I	uegs
Sea Temp	28.2	N	Wind Dir	226.44	- degs I		Speed, Dir- Speed 5.13	
- Raw Data Ir	n						-H-112	knts

Shut down the Auto IMET Logger. At the Auto IMET Logger, in the menu, go to "FILE", Scroll down and click "EXIT"



Shut down the AMVER SEAS. At the AMVER SEAS Menu, go to "AMVER", scroll down to "EXIT" and click.

You should be logged out of both programs at this point.

NOW>>>>Restart!

Go to your desktop ICON and double click on the "AMVERSEAS" ICON

When the AMVER SEAS comes up, go to the main menu, go to "SEAS", scroll down to "MET Automated", the on to "Auto IMET Logger ->Start as shown in the below example.

MA	ER SEAS UTC Time: J	JUN 13 2009 14:31:49	
AMVER	SEAS Setup Utility Help		
sail c	MET Manual -> Start	in l	
AND DE LE COLOR	MET Automated	Auto IMET Logger -> Start	
no		SCS MET Connect -> Start	
A REAL PROPERTY AND A REAL	et.	GOOD XBT Status: Off IS: OFF IMET Status: WAIT	
	THE BULINER TRON	NE,	
	Comms: NMEA: 2		
Sys: 6.00	×mit Type: Amver: 1	None MET: Email	

You should see good data being sent into the logger. This is the end of the Installation for the AMVERSEAS AutoIMET Portion.

AMVER SEAS SE	S UTC Time: JUN 13 2009 14:31:49
	AMVER SEAS
F Sys: 6.00	Auto IMET Status: Good Read IMET 0.24 mins Archive Status: ON - waiting Time Position Time Position Transmit ON - waiting Time Position Time Position Auto IMET Data mbar PRC OFF Image: Constraint of the position Barometer IO.6 m 1017.58 LwvR OFF Image: Constraint of the position Barometer IO.6 m 1017.58 LwvR OFF Image: Constraint of the position Relative 060 % mbar SWR OFF Image: Constraint of the position Air Temp 031.3 degC We OFF Image: Constraint of the position Wet 022.7 Wn OFF Image: Constraint of the position Ship Speed 0.0 knts Ship Dir T3.0 degs Marts Ship Dir T3.0 degs
	Dew Point 18.8 Wind Spd 4.92 Image: Constraint of the system of t

AMVERSEAS AUTO IMET

SCS Scientific Computer System Setup

Proper message template setup for the "SCS" is necessary for successful data collection. The following section describes and shows screenshots of the step by step procedure for setting up a message template for use with the AMVERSEAS AutoIMET. Setting up the SCS message template will be the task of the ET/IT on the NOAA Vessels. The PMO should be familiar with this process and assist the ET/IT as needed.

It is very important to note that the sensors and all other data inserted into the template must be in the exact order as shown with commas between each value type and semicolon at the end of message.

YYYY/MM/DD

HHMMSS

Lat

Long

SOG (speed over ground)

COG (course over ground)

Barometric Pressure

Relative Humidity

Air Temp

SeaTemp

wind speed value

true wind direction value

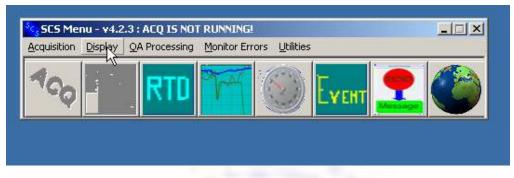
Dew Point

Wet bulb

;

MESSAGE CONFIGURATION

Before building your message template, you must set up your message configuration.



At the SCS Menu, go to Display as shown above.



At the drop down menu, as shown above, go to Send Data, then Scs Message Template Builder.



Insert <u>T</u> ext	Component Type Value
Insert <u>D</u> ate	
Insert T <u>i</u> me	
Insert <u>S</u> ensor	
Insert <u>C</u> ontrol Character	
Insert <u>P</u> ause	
Edit Component	
<u>R</u> emove Component	
Move Component Up	
Move Component Down	
<u>V</u> iew Sample Message	🗖 Auto Field Separator 💿 Comma 🔿 Sp
	Message Structure:

Go to "Message Configuration" as shown above.

Send SCS Message Builder - v4.2.3		
Message Builder Message	e Configuration	
COM Port COM Port TCP Socket UDP Socket UDP Broadcast UDP Multicast	Port Number Select Message Type 1991 Image: Optimized stress of the stress	
Port Settings Baud Rate: 9600 Parity: None Stop Bits: One Data Bits: Eight	Polled Command Insert Control	

Be sure to pick TCP Socket and insert the port number designated for your particular ship. Port Number 1991 is for the GORDON GUNTER...each ship will have it's own unique port number, it may be the same but it will probably be different. Select "Updated" message type and for the update rate, choose 1 second. Click on Insert Control.

*Other applications in SCS will be using TCP ports. Port 505 is reserved for ACQ. Sensors providing data over a network socket will require ports. Various other SCS messages use ports. Several may be running during a cruise. Manual input sensors use their own ports.

**If two applications use the same port, unpredictable behavior will result. There is no easy way to determine which ports will be used by SCS applications. The SCS administrator must inspect sensor configurations and message templates to identify potential conflicts.

BUILDING THE MESSAGE TEMPLATE



As shown above, go to the SCS Menu, go to "Display", scroll down to "Send Data", then to "Scs Message Template Builder"



Insert <u>T</u> ext	Component Type	Value
Insert <u>D</u> ate		
Insert Time		
Insert <u>S</u> ensor		
Insert <u>C</u> ontrol Character		
Insert <u>P</u> ause		
<u>E</u> dit Component	1	
<u>R</u> emove Component		
Move Component Up		
Move Component Down		
<u>V</u> iew Sample Message		T Auto Field Separator C Comma
	Messa	ige Structure:

This will be the screen that you will see.

To begin building the message template, click on "Auto Field Separator" as shown below.

Insert <u>T</u> ext	Component Type Value	
Insert <u>D</u> ate		
Insert T <u>i</u> me		
Insert <u>S</u> ensor		
Insert <u>C</u> ontrol Character		
Insert <u>P</u> ause		
Edit Component		
Remove Component		
Move Component Up		
Move Component Down	I	
<u>V</u> iew Sample Message	I⊈ jAuto Fie	ld Separator 🤅 💿 Comma 🔿 Spa
	Message Structure:	

This will save time building your message by automatically inserting the required field separator between each component.

The first component you will insert is "Date"

As shown below choose "Insert Date"

Help Message Builder Messa	ae Configuration		
Insert <u>T</u> ext	Component Type	Value	
Insert <u>D</u> ate			
Insert Time			
Insert Sensor			
Insert <u>C</u> ontrol Character			
Insert Pause			
Edit Component	1		
<u>R</u> emove Component			
Move Component Up			
Move Component Down			
<u>V</u> iew Sample Message		Auto Field Separator	mma 🔿 Spac
	- Messa	ige Structure:	

æ	Custom Date Forma	at
	Date Style;	Sunday, June 14, 200
	Seperator:	Long Date
c	Julian Day Format	
	ſ	

Choose custom Date Format, fill in the first block with the current date and then go to the Date Style drop down menu.

 Custom Date Format 	
Date Style:	Sunday, June 14, 200
	Long Date
Seperator:	Long Date Short Date
🔿 Julian Day Format	
• Julian Day Format	

At the choice arrow, as show above, choose the format YYYY/MM/DD

🖶 Insert	Date	
	 Custom Date Format 	
	Date Style: 2009/06/14	
	Seperator: / 🚽	
	🗢 Julian Day Format	
	Cancel	

Choose At the "Separator" drop down menu, choose (/) and click Insert.

Insert <u>T</u> ext	Component Type Date	Value yyyy/MM/dd	
Insert <u>D</u> ate	FreeText	,	
Insert Time			
Insert <u>S</u> ensor			
Insert <u>C</u> ontrol Character			
Insert <u>P</u> ause]		
<u>E</u> dit Component			
<u>R</u> emove Component			
Move Component Up			
Move Component Down			
⊻iew Sample Message		🔽 Auto Field Separator	Comma C Space
	Messac	je Structure:	

This is how it should appear. Next, click on "Insert Time"

Insert Text Component Type Value Insert Date yyyy/MM/dd Insert Time - Insert Sensor - Insert Control Character - Insert Pause - Edit Component - Move Component Up - Move Component Down - Insert Date -	Insert Date D. Fr Insert Time Insert Sensor Insert Control Character	yyyy/MM/dd	
Insert Date FreeText Insert Sensor Insert Sensor Insert Control Character Insert Pause Insert Pause Insert Pause Edit Component Insert Pause Move Component Up Insert Pause	Insert Date Insert Time Insert Sensor Insert Control Character	4	
Insert Sensor Insert Control Character Insert Pause Edit Component Remove Component Up	Insert <u>S</u> ensor Insert <u>C</u> ontrol Character		
Insert Control Character Insert Pause Edit Component Remove Component Up	Insert <u>C</u> ontrol Character		
Insert Pause Edit Component Remove Component Up			
Edit Component Remove Component Move Component Up	Insert <u>P</u> ause		
Remove Component Move Component Up			
Remove Component Move Component Up			
Move Component Up	Edit Component		
	<u>R</u> emove Component		
Move Component Down	Move Component Up		
	Move Component Down		
	Manu Canada Managa	Ed. Auto Cield Consulta	8. C
🔰 🔯 Auto Field Separatori 🕐 Comma 🔘 Spat	view sample wiessage	I♥ Auto Field Separator	🖲 comina 🕤 spac
Message Structure:			
View Sample Message 🔽 🔽 Auto Field Separator 💿 Comma		Auto Field Separator	• Comma C
		•	

As shown below, click on "insert Time"



P InsertTime	sus Menu - 74.2.3 ; Aug 1
Time Samp	les
8:08 PM	
Short Time	(am/pm) 🔹
	ł
⁹ Cancel	Insert

An "Insert Time" window will pop up. Put in the first box the current time as shown above.

er Di	** SLS Menu - v4.2.3 : ALŲ IS
1	🔛 InsertTime
	Time Samples
	8:08 PM
	ss
٨	Short Time (am/pm) 🝷
	Short Time (am/pm)
	Long Time (am/pm)
Ð	Long Time (24hr) 🛌 🗍
I	
l	/In
ni.	un Insert (

Then, on the drop down list, choose the "Long Time (24hr) " format as shown above.

ssir
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Bı
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In
In
Insi
t <u>C</u> o

Once you choose the "Long Time (24hr)" your time should reflect this choice. Click on "insert"

Message Builder Messa			
Insert <u>T</u> ext	Component Type	Value	
Insert <u>D</u> ate	Date FreeText	yyyy/MM/dd	
Insert Time	Time	HH:mm:ss	
Insert <u>S</u> erysor	FreeText	,	
Insert <u>C</u> ontrol Character			
Insert Pause			
	┛╞─────		
E di Comonati			
Edit Component			
<u>R</u> emove Component			
Move Component Up			
Move Component Down			
<u>V</u> iew Sample Message		🗹 Auto Field Separator 🛛 📀 Comma 📿	Spac
	 Messa	ge Structure:	

As shown above, click on "Insert Sensor".

Available Sensors	Selected Sensor:
38Khz Depth-Surf Fathoms	
38Khz_Depth_Surf_Feet 38khz_Depth_Surf_Meters	
352X-AVG-COG	
352X-AVG-COG-Value	
952X-AVG-SOG	Lat Lon Format
952X-AVG-SOG-Value	
952X-GPGGA 952X-GPGLL	C Decimal Degrees
952X-GPVTG	
952X-RMC	C DD ММ ММММ
952X-ZDA	
952X_COG	C DD MM SS SSS
952X_DATESTAMP 952X_GLL_LAT	
952X_GLL_LAT	Default DDMM.MMMM
952X_HDOPS	
952X LAT	
952X_LON	
952X_QUALITY 952X_RMC_COG	Decimal Value Format
952X_RMC_C0G	
952X_RMC_LON	C Truncate
952X RMC SOG	 Truncate
952X_SATS	
952X_SOG 952X_TIME	C Custom
952X_TIMESTAMP	
952X_VALIDITY	
AIR_TEMP	
AVG-TWD-Port	
AVG-TWD-Port-Value AVG-TWD-Stbd	G Default
AVG-TWD-Stbd-Value	er Deraut
AVG-TWS-Port	
AVG-TWS-Port-Value AVG-TWS-Stbd	
AVG-TWS-Stbd- AVG-TWS-Stbd-Value	
BARO_PRESSURE	
Comm7-Winch	
Desh5-Winch	Cancel Insert
Dew_Point 🗾	

At this point, a host of available sensors will be listed. *Each NOAA Vessel will have their unique sensor identification tag. The examples shown are for the NOAA SHIP GORDON GUNTER.

It is very important to note that the sensors and all other data inserted into the template must be in the exact order as shown with commas between each value type.

Available Sensors	Selected Sensor:
38Khz_Depth-Surf_Fathoms 38Khz_Depth_Surf_Feet 38khz_Depth_Surf_Meters 952X-AVG-COG	▲ 952×_LAT
352X-AVG-COG-Value 352X-AVG-SOG 352X-AVG-SOG-Value 352X-GPGGA	Lat Lon Format
952X-GPGLL 952X-GPVTG 952X-RMC 952X-ZDA 952X-ZDA	
352X_COG 352X_DATESTAMP 352X_GLL_LAT 352X_GLL_LON	DD MM SS.SSS Default DDMM.MMMM
952X_HDOPS 952X_LAT 952X_LON 952X_QUALITY 952X_RMC_COG 952X_RMC_LAT 952X_RMC_LON 952X_RMC_SOG 952X_SATS 952X_SATS 952X_SATS 952X_TIME 952X_TIME 952X_TIME 952X_TIME 952X_VALIDITY AIR_TEMP	Decimal Value Format
AVG-TWD-Port AVG-TWD-Port-Value AVG-TWD-Stbd-Value AVG-TWD-Stbd-Value AVG-TWS-Port-Value AVG-TWS-Stbd	C Default
WG-TWS-Stbd WG-TWS-Stbd-Value 3ARO_PRESSURE Comm7-Winch Desh5-Winch Dew_Point	Cancel Insert

Latitude is the first sensor. Scroll to LAT and highlight, be sure the Lat Lon Format is "Decimal Degrees" and click "insert"

*NEW SCS Build requires that you choose Decimal Degrees.

Insert <u>T</u> ext	Component Type	Value
Insert Date	Date	yyyy/MM/dd
ate	FreeText	· · · · ·
Insert T <u>i</u> me	Time FreeText	HH:mm:ss
Insert Sensor	SensorValue	952X_LAT
Insert <u>C</u> ontrol Character	FreeText	
Insert <u>P</u> ause]	
Edit Component		
<u>R</u> emove Component		
Move Component Up		
Move Component Down		
<u>V</u> iew Sample Message		Auto Field Separator 📀 Comma 🔿 Spa
	blass	age Structure:

This is how it should look.

In the message builder, click on "Insert Sensor"

Available Sensors	Selected Sensor:
38Khz_Depth-Surf_Fathoms 38Khz_Depth_Surf_Feet 38khz_Depth_Surf_Meters 952x-AVG-CDG 952X-AVG-CDG-Value 952X-AVG-SDG 952X-AVG-SDG-Value 952X-AVG-SDG-Value 952X-GPGGA 952X-GPGGA 952X-GPUTG 952X-GPUTG 952X-GPUTG 952X-GEU 952X-CDG 952X_CDG 952X_CDG 952X_CDG 952X_CDG 952X_GLL_LAT 952X_GLL_LON 952X_LON 952X_LON 952X_LON 952X_RMC_LOG 952X_RMC_LON	
952X_RMC_SOG 952X_SATS 952X_SOG 952X_TIME 952X_TIMESTAMP 952X_TIMESTAMP 952X_VALIDITY AIR_TEMP AVG-TWD-Port AVG-TWD-Port-Value AVG-TWD-Stbd AVG-TWS-Port AVG-TWS-Port AVG-TWS-Port AVG-TWS-Port AVG-TWS-Stbd AVG-TWS-Stbd AVG-TWS-Stbd AVG-TWS-Stbd AVG-TWS-Stbd AVG-TWS-Stbd-Value BARD_PRESSURE Comm7-Winch Desh5-Winch Desh5-Winch	C Custom Default Cancel

Scroll through the available sensors highlight Longitude (LON), and be sure the Lat Lon Format is picked as, "DECIMAL DEGREES" Click "Insert"

File Help	SCS Message Builder - v4.2.3			<u>_ </u>		
		e Configuration				
				1		
	Insert <u>T</u> ext	Component Type	Value			
	Insert Date	Date	yyyy/MM/dd			
-	inselt <u>D</u> ate	FreeText	·			
	Insert T <u>i</u> me	Time	HH:mm:ss			
	Insert <u>S</u> ensor	FreeText SensorValue	952X_LAT			
	inseit <u>s</u> ensui	FreeText	302A_DAT			
	Insert <u>C</u> ontrol Character	SensorValue	952X LON			
-	Invest Device	FreeText				
	Insert <u>P</u> ause					
	<u>E</u> dit Component					
	<u>R</u> emove Component					
	Move Component Up					
	Move Component Down					
	<u>V</u> iew Sample Message		Auto Field Separator Comma	C Space		
	Message Structure:					
21	009/07/21,20:14:24,*Sensor	Value - 952X_LAT*,*9	SensorValue - 952X_LON*,	A		
			-			
				V		

In the message builder click on "Insert Sensor"

/ailable Sensors	Selected Sensor:
18Khz_Depth-Surf_Fathoms 18Khz_Depth_Surf_Feet 18khz_Depth_Surf_Meters 152X-AVG-CDG	▲ 952X_SOG
152X-AVG-COG-Value 152X-AVG-SOG 152X-AVG-SOG-Value	Lat Lon Format
152X-GPGGA 152X-GPGLL	C Decimal Degrees
152X-GPVTG 152X-RMC 152X-ZDA	C DD MM MMMM
152X_COG 152X_COG 152X_DATESTAMP	C DD MM SS.SSS
152X_GLL_LAT 152X_GLL_LON 152X_HDOPS	C Default DDMM.MMMM
152X_LAT 152X_LON 152X_QUALITY 152X_RMC_COG 152X_RMC_LAT	Decimal Value Format
52X_RMC_LON 55X_RMC_SOG 55X_SATS	C Truncate
52X SOG 52X_TIME	C Custom
152X_TIMESTAMP 152X_VALIDITY NR_TEMP	
WG-TWD-Port WG-TWD-Port-Value WG-TWD-Stbd WG-TWD-Stbd-Value WG-TWS-Port WG-TWS-Port-Value	Default
WG-TWS-Stbd WG-TWS-Stbd-Value JARO_PRESSURE Comm7-Winch Desh5-Winch	Cancel
)ew Point	• Martin Martin

Scroll down the list of available sensors and find "Speed over Ground" SOG. Decimal Value Format should be Default. Click "Insert"

			_
Insert <u>T</u> ext	Component Type	Value	
Insert Date	Date	yyyy/MM/dd	
	FreeText	· · · · · · · · · · · · · · · · · · ·	
Insert T <u>i</u> me	Time FreeText	HH:mm:ss	
Insert Sensor	SensorValue	952X_LAT	
NC-	FreeText		+
Insert <u>C</u> ontrol Character	SensorValue	952X_LON	
Insert Pause	FreeText		
	SensorValue	GP90_SOG	
	FreeText		
<u>E</u> dit Component	1		
<u>R</u> emove Component			
Move Component Up			
Move Component Down			
<u>V</u> iew Sample Message		🗹 Auto Field Separator 🛛 🧿 Comma 🔘 Sp	ace
	Messa	age Structure:	

In the message builder click on "Insert Sensor"

Available Sensors	Selected Sensor:	
38Khz_Depth-Surf_Fathoms 38Khz_Depth_Surf_Feet 38khz_Depth_Surf_Meters	▲ 952X_COG	
952X-AVG-COG 952X-AVG-COG-Value		
952X-AVG-SOG	- Lat Lon Format	
952X-AVG-SOG-Value 952X-GPGGA		
952X-GPGLL	Decimal Degrees	
952X-GPVTG 952X-RMC 952X-ZDA	C DD MM.MMMM	
952X COG	C DD MM SS.SSS	
952X_DATESTAMP 952X_GLL_LAT		
952X_GLL_LON 952X_HDOPS	Default DDMM,MMMM	
952X_LAT		
952X_LON 952X_QUALITY		
952X RMC COG	Decimal Value Format	
952X_RMC_LAT 952X_RMC_LON	C Truncate	
952X RMC SOG	• I runcare	
952X_SATS 952X_SOG	C Custom	
952X_TIME 952X_TIMESTAMP	Custom	
952X_VALIDITY		
AIR_TEMP AVG-TWD-Port		
AVG-TWD-Port-Value		
AVG-TWD-Stbd AVG-TWD-Stbd-Value	Default	
AVG-TWS-Port AVG-TWS-Port-Value		
AVG-TWS-Stbd		
AVG-TWS-Stbd-Value BARO_PRESSURE		
Comm7-Winch	Connal	
Desh5-Winch Dew Point	Cancel Insert	

Scroll down the available sensors and highlight COG (Course over Ground), Decimal Value Format should be Default, click "Insert"

Date	844410
	yyyy/MM/dd
FreeText	- inc
and the second se	HH:mm:ss
SensorValue	952X_LAT
FreeText	
SensorValue	952X_LON
	2 250 / 2002
	952X_SOG
	952X COG
	🗖 Auto Field Separator 🔗 Comma 🖸 S
	Time FreeText SensorValue FreeText

In the message builder click on "Insert Sensor"

Available Sensors	Selected Sensor:
38Khz_Depth-Surf_Fathoms	
38Khz_Depth_Surf_Feet	BARO_PRESSURE
38khz_Depth_Surf_Meters	
952X-ĀVG-COG	
952X-AVG-COG-Value 952X-AVG-SOG	
952X-AVG-SOG-Value	Lat Lon Format
952X-GPGGA	
952X-GPGLL	C Decimal Degrees
952X-GPVTG	
952X-RMC	C DD MM.MMMM
952X-ZDA	A DE MAAMMAA
952X COG	C DD WW CO DCO
952X_DATESTAMP	C DD MM SS.SSS
952X_GLL_LAT	
952X GLL LON	C Default DD,MM,MMMM
952X_HDOPS	And the control of th
952X_LAT	
952X_LON	
952X_QUALITY	Decimal Value Format
952X_RMC_COG	Decinal value romat
952X_RMC_LAT	
952X_RMC_LON	C Truncate
952X_RMC_SOG	and the second sec
952X_SATS 952X_SOG	122
952X_30G 952X_TIME	C Custom
952X_TIMESTAMP	
952X_VALIDITY	
AIR_TEMP	
AVG-TWD-Port	
AVG-TWD-Port-Value	
AVG-TWD-Stbd	Default
AVG-TWD-Stbd-Value	
AVG-TWS-Port	
AVG-TWS-Port-Value	
AVG-TWS-Stbd	
AVG-TWS-Stbd-Value	
BARO PRESSURE	
Comm7-Winch	Cancel Insert
Desh5-Winch	Cancel Insect
Dew_Point	

Scroll down the available sensors and highlight "Barometric Pressure", BARO PRESSURE, Decimal Value Format should be Default, Click "Insert"

. .		Value
Insert <u>T</u> ext	Component Type	
Insert Date	Date FreeText	yyyy/MM/dd
		, HH:mm:ss
Insert T <u>i</u> me	FreeText	пп.шш.ss
Insert <u>S</u> ensor	SensorValue	952X_LAT
I Insert Sensor	FreeText	
Insert <u>C</u> ontrol Character	SensorValue	952X LON
Invest Devue	FreeText	
Insert <u>P</u> ause	SensorValue	GP90_SOG
	FreeText	
	SensorValue	952X_COG
<u>E</u> dit Component	FreeText	,
Remove Component	SensorValue	BARO_PRESSURE
	FreeText	· ·
Move Component Up		
Move Component Down		
<u>V</u> iew Sample Message	.	✓ Auto Field Separator
	-	age Structure:

In message builder, click on "Insert Sensor"

vailable Sensors	Selected Sensor:
TI-TDS TI-TPC TI-TPT	
TI-Track-Bearing TI-Trawl-Depth-Fath TI-Trawl-Depth-Fath-Value TI-Trawl-Lat	Lat Lon Format
TI-Trawl-Lon TI-Trawl-Temp TI-VTG	C Decimal Degrees
TI-ZDA .OCAL_DIFF	C DD MM.MMMM
Payout-Comm7 Payout-Desh5 Port-Trawl-Payout	C DD MM SS(SSS
Port-Trawl-Rate Port-Trawl-Tension PT-YOUNG-WIND-RAW	C Default DDMM.MMMM
PT_WIND_DIR/60_REL PT_WIND_DIR_REL PT_WIND_SPD/60_REL PT_WIND_SPD_REL	Decimal Value Format
PT_WND_GUST/60_REL Rate-Comm7	C Truncate
Rate-Desh5 REL HUMIDITY RMC_COG RMC_LAT	C Custom
RMC_LAT RMC_LON RMC_SOG AMOS-Air-Temp	
AMOS-Air-Temp-Value AMOS-Barometer AMOS-Barometer-Value AMOS-COG AMOS-COG	Default
AMOS-GYRO AMOS-GYRO-Value AMOS-Lat AMOS-Lat-Value	
AMOS-Lon AMOS-Lon-Value	Cancel Lysert

Scroll down the available sensors and highlight Relative Humidity, "REL HUMIDITY", Decimal Value Format should be Default, click "Insert"

<mark>e Send SCS Message Builder - v4.2.3</mark> File Help	}		<u>_ </u>
Message Builder Messag	je Configuration		
Insert Text	Component Type	Value	
Insert <u>D</u> ate	Date FreeText	yyyy/MM/dd	_
Insert T <u>i</u> me	Time	HH:mm:ss	
Insert Sensor	SensorValue	952X_LAT	
Insert <u>C</u> ontrol Character	FreeText SensorValue	952X_LON	
Insert <u>P</u> ause	FreeText SensorValue	GP90_SOG	
	FreeText SensorValue	952X_COG	
Edit Component Remove Component	FreeText SensorValue	BARO_PRESSURE	
Move Component Up	FreeText SensorValue	REL_HUMIDITY	
Move Component Down	FreeText	, , ,	
<u>V</u> iew Sample Message		Auto Field Separator 💿 Comma 🔿	Space
	Messa	ge Structure:	
		SensorValue - 952X_LON*,*SensorValue - rValue - BARO_PRESSURE*,*SensorValue -	•
1			

In message builder, click on "Insert Sensor"

nsertSensor	
Available Sensors	Selected Sensor:
38Khz_Depth-Surf_Fathoms 38Khz_Depth_Surf_Feet 38khz_Depth_Surf_Meters 952X-AVG-CDG 952X-AVG-CDG-Value 952X-AVG-SDG	AIR_TEMP
952X-AVG-SOG-Value 952X-GPGGA 952X-GPGLL 952X-GPVTG	C Decimal Degrees
952X-RMC 952X-ZDA 952X_COG 952X_DATESTAMP	
952X_GLL_LAT 952X_GLL_LON 952X_HDOPS 952X_LAT 952X_LON	C Default DDMM.MMMM
952X_QUALITY 952X_RMC_COG 952X_RMC_LAT 952X_RMC_LON	C Truncate
952X_RMC_SOG 952X_SATS 952X_SOG 952X_TIME	C Custom
952X_TIMESTAMP 952X_VALIDITY AIR_TEMP AVG-TWD-Port	
AVG-TWD-Port-Value AVG-TWD-Stbd AVG-TWD-Stbd-Value AVG-TWS-Port AVG-TWS-Port-Value AVG-TWS-Stbd	Default
AVG-TWS-Stbd-Value BAR0_PRESSURE Comm7-Winch Desh5-Winch Dew_Point	Cancel
Dew_Point	

Scroll down the available sensors and highlight "AIR TEMP", Decimal Value Format should be Default. Click on "Insert"

🔜 Send SCS Message Builder - v4.2.3	1		<u>_ </u>
File Help			
Message Builder Messag	e Configuration		1
Insert <u>T</u> ext	Component Type	Value	
Insert <u>D</u> ate	Date FreeText	yyyy/MM/dd	
Insert Time	Time	HH:mm:ss	
Insert Sensor	FreeText SensorValue	952X_LAT	
Insert <u>C</u> ontrol Character	FreeText SensorValue	952X LON	
Insert <u>P</u> ause	FreeText SensorValue	GP90 SOG	
	FreeText		
<u>E</u> dit Component	SensorValue FreeText	952X_COG	
<u>R</u> emove Component	SensorValue FreeText	BARO_PRESSURE	
Move Component Up	SensorValue FreeText	REL_HUMIDITY	_
Move Component Down	SensorValue	ÁIR_TEMP	_
	FreeText		
<u>V</u> iew Sample Message		🔽 Auto Field Separator 💿 Comma 🔿	Space
	Messa	ge Structure:	
2009/07/21 20:34:29 *Sensor	Valuo - 952X AT**	SensorValue - 952X_LON*,*SensorValue -	
		orValue - BARO_PRESSURE*,*SensorValue -	

In the Message Builder, Click on "Insert Sensor"

Available Sensors	Selected Sensor:
SAMOS-Air-Temp SAMOS-Air-Temp-Value SAMOS-Barometer	SAMOS-True-Wind-Spd-Value
SAMOS-Barometer-Value SAMOS-COG	
SAMOS-COG-Value	-Lat Lon Format
SAMOS-GYRO SAMOS-GYRO-Value	
SAMOS-Lat	C Decimal Degrees
SAMOS-Lat-Value	C. C
SAMOS-Lon SAMOS-Lon-Value	C DD MM MMMM
SAMOS-Rel-Humidity	C DD MM SS.555
SAMOS-Rel-Humidity-Value SAMOS-Rel-Wind-Dir	10 00 MM 30,000
SAMOS-Rel-Wind-Dir-Value	C Default DDMM.MMMM
SAMOS-Bel-Wind-Spd	
SAMOS-Rel-Wind-Spd-Value SAMOS-SOG	
SAMOS-SOG-Value	Decimal Value Format
SAMOS-SST SAMOS-SST-Value	Decimal value i omat
SAM05-551-Value SAM0S-True-Wind-Dir	C Truncate
SAMOS-True-Wind-Dir-Value	⊷ mulcale
SAMDS-True-Wind-Spd SAMDS-True-Wind-Spd-Value	
SAMOS-TSG-Conductivity	C Eustom
SAMOS-TSG-Conductivity-Value SAMOS-TSG-Salinity	
SAMOS-TSG-Salinity-Value	
SAT_DATE SAT_TIME	
SBE-21-TSG	Default
SBE-Conductivity	- Colour
SBE-Depth SBE-Fluro	
SBE-Salinity	
SBE-Sound-Velocity SBE-Xmiss	
SBE Oxygen	
SBE_Temp Scan Num	Cancel Insert
scan_ivum	

Scroll down the available sensors and highlight "True-Wind-Spd- Value" Decimal Value Format should be Default. Click on "Insert"

*SAMOS was originally used and we have moved to use RM Young data.

🔚 Send SCS Message Builder - v4.2.3		_	
File Help			
Message Builder Messag	e Configuration		
		1	- 1
Insert <u>T</u> ext	Component Type	Value	▲
Insert Date	Date	yyyy/MM/dd	
	FreeText Time	HH:mm:ss	
Insert T <u>i</u> me	FreeText	HH:mm:ss	
Insert Sensor	SensorValue	952X_LAT	
	FreeText		
Insert <u>C</u> ontrol Character	SensorValue	952X LON	
lineat David	FreeText		
Insert <u>P</u> ause	SensorValue	GP90_SOG	
	FreeText		
	SensorValue	952X_COG	
<u>E</u> dit Component	FreeText		
<u>R</u> emove Component	SensorValue	BARO_PRESSURE	
	FreeText		
Move Component Up	SensorValue	REL_HUMIDITY	
Move Component Down	FreeText SensorValue	ÁIB_TEMP	
Move Component Down	FreeText	AIR_IEMP	-1
	FileeText	 []]•[-
View Sample Message		🔽 Auto Field Separator 🛛 💿 Comma 🔿 Spa	ace
	Messa	ige Structure:	
			_
		SensorValue - 952X_LON,*SensorValue -	▲
GP90_SOG*,*SensorValue -	952X_COG*,*Senso	orValue - BARO_PRESSURE*,*SensorValue -	
			<u> </u>
J			

In the message builder, click on "Insert Sensor"

Available Sensors	Selected Sensor:
SAMOS-COG-Value SAMOS-GYRO SAMOS-GYRO-Value SAMOS-Lat	SAMOS-True-Wind-Dir-Value
SAMOS-Lat-Value SAMOS-Lon SAMOS-Lon-Value	Lat Lon Format
SAMOS-Rel-Humidity SAMOS-Rel-Humidity-Value SAMOS-Rel-Wind-Dir	C Decimal Degrees
SAMOS-Rel-Wind-Dir-Value SAMOS-Rel-Wind-Spd SAMOS-Rel-Wind-Spd-Value	
SAMOS-SOG SAMOS-SOG-Value SAMOS-SST	C DD MM SS.SSS
SAMOS-SST-Value SAMOS-True-Wind-Dir	
SAMDS-True-Wind-Dir-Value SAMDS-True-Wind-Spd SAMDS-True-Wind-Spd-Value	Decimal Value Format
SAMDS-TSG-Conductivity SAMDS-TSG-Conductivity-Value SAMDS-TSG-Salinity	C Truncate
SAMOS-TSG-Salinitý-Value SAT_DATE SAT_TIME	C Custom
SBE-21-TSG SBE-Conductivity SBE-Depth	
SBE-Fluro SBE-Salinity	
SBE-Sound-Velocity SBE-Xmiss SBE_Dxygen	Default
SBE_Temp Scan_Num Sea_Temperature	
Seabird-Profiler Sperry-Depth-Surf-M Sperry-Depth-Surf-M-Value	Cancel
Sperry-Ground-Spd-10	

Scroll down the available sensors and highlight "True-Wind-Dir- Value", Decimal Value Format should be Default. Click "Insert"

*SAMOS was originally used and we have moved to use RM Young Data.

🔡 Send SCS	Message Builder - v4.2	.3		
File Help				
Messa	ige Builder Messa	an Configuration		
				1
	Insert <u>T</u> ext	Component Type	Value	
	Insert Date	FreeText	,	
	insen <u>D</u> ate	SensorValue	952X_LON	_
	Insert Time	FreeText		_
	-	SensorValue	GP90_SOG	
	Insert <u>S</u> ensor	FreeText	,	_
	nsert Control Character	SensorValue	952X_COG	
	nisert <u>c</u> ontrol character	FreeText		
	Insert <u>P</u> ause	SensorValue FreeText	BARO_PRESSURE	
		SensorValue	REL HUMIDITY	
		FreeText		
	Edit Component	SensorValue	AIR TEMP	
		FreeText		
	<u>R</u> emove Component	SensorValue	, SAMOS-True-Wind-Spd-Value	
	Mana Camana Mila	FreeText		
	Move Component Up	SensorValue	SAMDS-True-Wind-Dir-Value	
N N	Move Component Down	FreeText		
				▼
		•		
	<u>V</u> iew Sample Message	Í	🗹 Auto Field Separator 🛛 🧿 Comma 🔿 S	pace
		Maccaa	e Structure:	
		messay	s officiale.	
laces.	102104 00 02 50 45			-
			ensorValue - 952X_LON*,*SensorValue -	▲
GP90	J_SOG*,*SensorValue	e-952X_COG*,*Sensor\	/alue - BARO_PRESSURE*,*SensorValue -	-
				<u> </u>
1				

In message builder, click on "Insert Text"

vailable Sensors	Selected Sensor:
52X_GLL_LON 52X_HDOPS 52X_LAT	Dew_Point
52X_LAT 52X_LON 52X_QUALITY 52X_RMC_COG 52X_RMC_LAT 52X_RMC_LON 52X_RMC_SOG 52X_SATS 52X_SOG 52X_SOG 52X_TIME 52X_TIME 52X_TIMESTAMP 52X_TIMESTAMP 52X_TIMESTAMP 52X_TIMESTAMP 52X_VALIDITY JR_TEMP VG-TWD-Port VG-TWD-Port-Value VG-TWD-Stbd-Value VG-TWS-Port-Value VG-TWS-Port-Value VG-TWS-Stbd	Lat Lon Format C Decimal Degrees C DD MM.MMMM C DD MM.SS.SSS C Default DDMM.MMMM Decimal Value Format
WG-TWS-Stbd-Value (ARO_PRESSURE comm7-Winch)esh5-Winch)est-Head-to-Bottom)ist-Head-to-Bottom-Fath)ist-Head-to-Bottom-Fath-Value)ist-Head-to-Foot)ist-Head-to-Foot-Fath)ist-Head-to-Foot-Fath-Value K60-38kHz-NMEA	C Truncate C Custom
NOUSSENT2-NMEA Q50-Depth-Surf-Fath Q50-Depth-Surf-Fath-Value Q50-Depth-Surf-M Q50-Depth-Surf-M-Value Q50-NMEA Q50_Depth_Fathoms Q50_Depth_FT Q50_Depth_Meters	Cancel Insert

Scroll down the available sensors and highlight "Dew Point", Decimal Value Format should be Default. Click "Insert"

🔜 Send SCS Message Builder - v4.2.3	3	
File Help		
Message Builder Messag	ge Configuration	
messai	ge oblinguidabh	1
Insert <u>T</u> ext	Component Type	Value
Insert Date	FreeText	,
Insert Date	SensorValue	GP90_SOG
Insert Time	FreeText	
	SensorValue	952X_COG
Insert Sensor	FreeText	· · · · · · · · · · · · · · · · · · ·
Insert Control Character	SensorValue	BARO_PRESSURE
Inselt <u>C</u> ontroi Character	FreeText	,
Insert Pause	SensorValue	REL_HUMIDITY
	FreeText	· · · · · · · · · · · · · · · · · · ·
	SensorValue	AIR_TEMP
E-D Communit	FreeText	· · · · · · · · · · · · · · · · · · ·
<u>E</u> dit Component	SensorValue	SAMOS-True-Wind-Spd-Value
Remove Component	FreeText	· · · · · · · · · · · · · · · · · · ·
	SensorValue	SAMOS-True-Wind-Dir-Value
Move Component Up	FreeText	· · · · · · · · · · · · · · · · · · ·
	SensorValue	Dew_Point
Move Component Down	FreeText	· · · · · · · · · · · · · · · · · · ·
<u>V</u> iew Sample Message		Auto Field Separator © Comma © Space
	- Mossa	ge Structure:
	INICO30	go onacaro.
		'SensorValue - 952X_LON*,*SensorValue -
GP90_SOG*,*SensorValue	-952X_COG*,*Senso	orValue - BARO_PRESSURE*,*SensorValue -
1		
1		

In the message builder, click on "Insert Sensor"

vailable Sensors	Selected Sensor:
Sperry-Water-Spd-10 Sperry-Water-Spd-10-Value	Wet-Bulb
Sperry Depth	Thorean
Sperry_Depth_CKsum	
Sperry_Gnd_Spd_F_A	
Sperry_Gnd_Spd_P_S Sperry_Water_Spd_F_A	Lat Lon Format
Sperry_Water_Spd_P_S	
SperryDepth-VDDRU	C Decimal Degrees
SperrySpeedLog-VDVBW	
STB-YOUNG-WIND-RAW	C DD MM.MMMM
Stbd-Trawl-Payout	STORE AND THE
Stbd-Trawl-Rate Stbd-Trawl-Tension	C DD MM SS.SSS
STBD_WIND_DIR/60_REL	
STBD WIND DIR REL	🙆 Default DDMM.MMMM
STBD WIND SPD/60 REL	
STBD_WIND_SPD_REL	
STBD_WND_GUST/60_REL Fension-Comm7	
rension-Comm7 Fension-Desh5	Decimal Value Format
FPC-Depth	
Frawl-Depth-Meters	C Truncate
Trawl-Winch-Port	<. Transac
Frawl-Winch-Stbd	
Frue-Target-Bearing Frue-Wind-Port	C Custom
True-Wind-Port-Direction	
Frue-Wind-Port-Speed	
Frue-Wind-Stbd	· · · · · · · · · · · · · · · · · · ·
Frue-Wind-Stbd-Direction Frue-Wind-Stbd-Speed	
rsg_cond	O Default
ISG_INT_TEMP	
ISG_SALINITY	
JTC_DAY JTC_MONTH	
JTC_TIME	
JTC_YEAR	
Water_Speed_Cksum	
N/et-Bulb	Cancel Insert
OUNG-MET-RAW	
	21 21 21 23 23 23 23 23 23 23 23 23 23 23 23 23

Scroll down the available sensors and highlight "wet-bulb", Decimal Value Format should be Default. Click "Insert"

	Component Type	Value
Insert Date	FreeText	
	SensorValue	952X_COG
Insert T <u>i</u> me	FreeText SensorValue	, BARO PRESSURE
Insert Sensor	FreeText	BANO_FRESSORE
iniseit <u>o</u> enisei	SensorValue	REL HUMIDITY
Insert <u>C</u> ontrol Character	FreeText	
In cash Davies	SensorValue	AIR TEMP
Insert <u>P</u> ause	FreeText	· ·
	SensorValue	SAMOS-True-Wind-Spd-Value
5 10 0	FreeText	
Edit Component	SensorValue	SAMOS-True-Wind-Dir-Value
<u>R</u> emove Component	FreeText SensorValue	, Dave Brit
	FreeText	Dew_Point
Move Component Up	SensorValue	ý Wet-Bulb
Move Component Down	FreeText	
	•	
<u>V</u> iew Sample Message		Auto Field Separator 💿 Comma 🔿 Spa
	Maaa	age Structure:
	IVIESS	aue oliuciule.

You are finished with inputting sensors, as shown above, toggle off the Auto Field Separator. To complete the template, you will need to insert a (;) at the end of the message.

Insert <u>T</u> ext	Component Type	Value
Insert Date	Date	yyyy/MM/dd
inselt <u>D</u> ate	FreeText	
Insert Time	Time	HH:mm:ss
-	- FreeText	
Insert <u>S</u> ensor	SensorValue	952X_LAT
Insert Control Character	FreeText	25011 ON
mont <u>control character</u>	SensorValue	952X_LON
Insert <u>P</u> ause	FreeText	2 0572 000
	SensorValue FreeText	952X_SOG
		952X COG
Edit Component	FreeText	3527_000
	SensorValue	BARO PRESSURE
Remove Component	FreeText	BANG_I RESSORE
Move Component Up	SensorValue	REL HUMIDITY
Move Component Op	FreeText	
Move Component Down	SensorValue	AIR_TEMP
	FreeText	
	•	
View Sample Message	20-0-	🗖 Auto Field Separator 🛛 🕥 Comma 🥂 S
		
	Messa	age Structure:

In the message builder, click on "Insert Text"

Insert <u>T</u> ext	Component Type	Value
Insert Date	Date FreeText	yyyy/MM/dd
 Insert Time	Time	HH:mm:ss
1	- FreeText	
Insert <u>S</u> ensor	SensorValue FreeText	952X_LAT
Insert <u>C</u> ontrol Character	SensorValue	952X_LON
Insert <u>P</u> ause	Enter free text	
Remove Component Move Component Up	<u><u>C</u>ancel</u>	
Move Component Down	SensorValue	ÁIR_TEMP
<u>1</u>	FreeText	
<u>V</u> iew Sample Message		🗖 Auto Field Separator 📀 Comma 🔿 Sp
		ge Structure:

In the free text box, type ";" (semi-colon) and click "OK"

Insert Text	Component Type	Value
	Date	yyyy/MM/dd
Insert <u>D</u> ate	FreeText	
Insert Time	Time	HH:mm:ss
macit rime	- FreeText	
Insert <u>S</u> ensor	SensorValue	952X_LAT
	FreeText	
Insert <u>Col</u> trol Character		952X_LON
Insert Pause	FreeText	
moon <u>r</u> adoo	SensorValue	952X_SOG
	FreeText	2
E P O	SensorValue	952X_COG
Edit Component	FreeText	
<u>R</u> emove Component	SensorValue	BARO_PRESSURE
N NAMES AND ADDRESS	FreeText	
Move Component Up	SensorValue	REL_HUMIDITY
H. C. Barrow	FreeText SensorValue	ÁIR_TEMP
Move Component Down	FreeText	
	I FleeText	 >
<u>V</u> jew Sample Message		🗖 Auto Field Separator 🛛 🤄 Comma 🔿 S
	Messe	iqe Structure:

In the message builder, click on "Insert Control Character"

🖶 InsertContr	ol	-	<u>_ </u>
C CR	C BS	C DLE	C CAN
۹. LF	с зон	C DC1	C EM
n stx	с нт	C DC2	C SUB
° etx	C VT	C DC3	C ESC
C EOT	C FF	C DC4	C FS
C ENQ	CNUL	C NAK	r GS
C ACK	r so	C SYN	C RS
C BEL	C SI	○ ETB	C US
Cano	xel	In	sert

	InsertContr	ol		<u>_ 0 </u>	×
< Si nd Si	C CR	C BS	C DLE	C CAN	
Help	۰LF	C SOH	C DC1	C EM	
	o stx	с нт	C DC2	C SUB	
_	C ETX	c vt	C DC3	C ESC	
	C EOT	C FF	C DC4	C FS	
	C ENQ	C NUL	C NAK	r GS	BI
	C ACK	r so	C SYN	r RS	
	O BEL	C SI	C ETB	r US	iel
201 95;	Can		In	selt	12 F
W		Click or	"Insert"		

Open 5ave	Builder Message Configuration					
Save As	Insert <u>T</u> ext	Component Type	Value			
Exit	Insert Date	FreeText				
	Insert Date	SensorValue	REL_HUMIDITY			
	Insert Time	FreeText				
-		SensorValue	AIR_TEMP			
1	Insert <u>S</u> ensor	FreeText				
Ins	ert <u>C</u> ontrol Character	SensorValue	Sea_Temperature			
	sert <u>c</u> ontrol character	FreeText	CANCE TO AN IS IN I			
Insert Pause		SensorValue FreeText	SAMOS-True-Wind-Spd-Value	- 200		
-		SensorValue	, SAMOS-True-Wind-Dir-Value	-11		
		FreeText	SAMUS-True-wind-Dir-value			
	Edit Component	SensorValue	Dew Point	-11		
		FreeText	Dew_rowk	-11		
E	Remove Component	SensorValue	Wet-Bulb	-12		
	tove Component Up	FreeText		18		
	nove component op	FreeText		-11		
Mo	ve Component Down	Control	ĹF			
				ř		
⊻i	ew Sample Message		🗖 Auto Field Separator 🛛 💿 Comma 🔿 S	- pape		
		Messa	age Structure:			

Once you are finished with the template, go up to "File" and "SAVE AS"



e As			? ×
Save in:	C SendScs		_
My Recent Documents Desktop	 adcp gyro and gps.ssm AmVer-SEAS.ssm cds.ssm CDS-test soc.ssm comm17.ssm comm26.ssm comm37.ssm comm38.ssm comm40.ssm GPS1.ssm GPS1.ssm GPS.ssm gyro heading.ssm Mammal_data_to_BDC.ssm Mammal_Gyro.ssm 	MammalSock2.ssm MammalSocket.ssm MarMammal_Environment.ssm MocNess GPS Feed.ssm NMEA-2-ITI-EK60.ssm RD-30 Bridge.ssm RD-30 Trawl Booth.ssm soctest.ssm test.ssm	
ly Network Places	File name: AmVer-SEAS.		Sare Cancel

Save as above...Save in "SendScs", File name AmVer-SEAS.ssm,

Save as type: Template files (*.ssm)

Click on "Save"

At the SCS Menu...



Go to "Display", "Send Data", Send Scs Message as shown above

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angen DS test tot, annel 7 con oner35 con oner38 con on	Tai Parti :: D. 10-1147/Lanter / Target Watti Ball And Canter / Target U. 13-1147/Lanter / Target					
		Tenglate	Saw	3 d Coverton	l Monage	1
		Temploto	Sau	B of Corrections	Moscage	
		Texplate	No.	3 d'Correction	l Monage	
		Torydde	Nave	3 d'Carvestans		

You will see along the left hand side, in the Send SCS Message Manager page, the AmVerSEAS message. Double click on the message.



	dessage Manager - v4.2.3						- 10 ×
Message Mana Mane adop garo an. Andrer SEAS cds sam cds sam cds sam cds sam comm37 sam c	Full Path D (SHP20)Guster(1 mmp D (SHP20)Guster(1 mmp) D (SHP20)Gus	Selected Templete Far Selected Templete Far DISHIPAGGeventTem Convection Status Device Port 1991 First Connect	plater\SendScrW Update Ra	VmVerSEAS.ssm	Selected SCS Message (MessageDescriptionXMessageCompone_ Int Kay-"Tpate" value-"Xyyy/MM/dd" formati-"none" A MessageComponent kay-"Tpate" Text values", formati-"none" Values" Huma si Nonet - "one" Values" tomati-"none" Values" tomati-"none"		
		Tençlate AniVerSEAS.ssm	Status INACTIVE	0	Message		
•1							

Message sender will pop up, as above, click on "Start Sending"

Manage Manager							- Mark
Hame Full Pair Ani/Or SEA3 D. SSHIP Ani/Or SEA3 D. SSHIP C05. Anif D. SSHIP CorrendD ani D. SSHIP CorrendD ani D. SSHIP Anamad, data D. SSHIP Marmad, Sda4 D. SSHIP Marmad, Sda4	ADVIA.indextV. Tempt 400/LaurentV. Tempt	Cenessage Perelet for Selected Tanglas Fa DMIHISHOGumeYte Cenession State Device Port Birst Connect	Update Rate	Selected SG3 Messa (MessacpeDecc nt key="Date" ve format="none"/> Key="From" act" /> KMessageCon value="Thirms"	ge iptions (MessageCompone_ two="sysyM4M/dis" Cales esgeComponent datues." formet="none" ponent Kusy="Time" e* formet="none" ponent Kusy="Time" are ponent Kusy="Time" are two		
		Template On/or-SEAS com	Status III of Cor RMCTIVE 0	electoria Marsage			

The bottom of this page is still showing red which is a fault of the SCS software. It should actually show green and say active, but it doesn't even though it is active.

AMVER SEAS S	AS UTC Time: JUN 13 2009 14:31:49 etup Utikiy Help- errv met edm ANNER SEAS Auto IMET Logger- Data Source: SCS ; Xmission: E-mail File Setup Utikities Help
Binagit Sna Sna Sna	Auto IMETStatus Good Read IMET 0.24 mins Archive Status: ON - waiting Time Position Barometric Impart PRC DFF Impart Pressure Barometric Impart PRC DFF Impart PRC Air Temp 031.3 degC We DFF Met 022.7 Wind Dir 235.00 degs Sea Temp 28.2 Wind Dir 235.00 degs Raw Data In 2009/06/13.14:34:02.28.30542:47.52215.00.4.072. Impart PRC True Wind Dir 235.00 2009/06/13.16:31.060.031.3.28.2.4:92.235.022.7.025.0 Impart PRC Impart PRC 235.00 degs

You should see data streaming in on the AutoIMET Logger at this point.

*Note: At anytime the SCS goes down or is shut down, you must manually restart the amVerSEAS message.

Editing, removing or moving components within the message builder.

	1	
Insert <u>T</u> ext	Component Type	Value
Insert Date	Date	yyyy/MM/dd
macit <u>D</u> ate	FreeText	,
Insert T <u>i</u> me	Time FreeText	HH:mm:ss
Insert <u>S</u> ensor	SensorValue	952X_LAT
inseit <u>s</u> ensoi	FreeText	332A_DAT
Insert <u>C</u> ontrol Character	SensorValue	952X_LON
lucest Device	FreeText	
Insert <u>P</u> ause	SensorValue	GP90_SOG
	FreeText	,
5.0.0	SensorValue	952X_COG
Edit Component	FreeText	
Remove Component	SensorValue FreeText	AVG-TWD-Stbd
Move Component Up		
Move Component Down		
<u>V</u> iew Sample Message		☑ Auto Field Separator
	 Mess	sage Structure:

As shown above, if you need to edit your message builder, the bottom left buttons allow you the option to manipulate individual components as needed. Click on the component to be edited, then click on the appropriate command.

TROUBLE SHOOTING

- McAfee virus protection will prohibit transmissions, you will need to send an acception (usually port 25)
- At times the Time Server will lock up for no apparent reason. This will be indicated by status showing GPS Status Failed. You will need to go into the IMET LOGGER, go to SETUP, SCS Program, and Start ->SCS Socket.
- ***IF EVER you need to REMOVE AMVERSEAS AutoIMET off the computer.....be sure the Mail Service is disabled or it will lock up your computer.
- •