1. Cable Fish Device

Revision History			
Revision	Date	Author	Comments
01A	Mar 27, 2025	B Wright	Initial release

1.1 Overview

The CableFish device supports input from and output to the North Sea Systems' Cable Fish. Input and output messages are comma delimited.

1.2 Add Device

- 1. From the Explorer view or Setup ribbon, select Devices to display the IO Devices
- 2. From the dropdown list, select Cable Fish and click the + button



Figure 1 IO Devices - Cable Fish Device Selection

3. Configure the Device IO parameters and apply them accordingly (refer to the Devices section of the User Guide)

1.3 Configure Device

 Access the Configure Cable Fish view by either right mouse clicking on the Cable Fish device in the list and selecting Device Settings or selecting it in the list and clicking the Configure device icon () in the Device view tool bar to open the Configure Cable Fish dialog (see Figure 2)



🔮 Configure Cable Fish — 🛛			
Projected CRS WGS 84 / UTM zone 15N projected (32615)			
Latency 0.000 s			
Output			
Heading of cable	None		*
USBL beacon position	None		*
Center chute position	None		*
КР	None		*
DCC	None		*
		ОК	Cancel

Figure 2 Cable Fish Configuration

- 2. Projected CRS
 - a. Select the Horizontal CRS from those added to NavView that the position data, both received from the Cable Fish and transmitted to ,it are referenced to
- 3. Input
 - a. Input latency:
 - i. If the latency of the input message is known, enter it here, otherwise leave this at 0
- 4. Output
 - a. NavView supports the selection of the data source for each output items to provide the greatest flexibility
 - i. For each output type, the respective dropdown list presents all available data sources of that type
 - ii. From the respective dropdown lists, select the desired data source
 - iii. If the option None is selected for a data source, the respective field in the output message is empty
 - b. Figure 3 is an example of appropriate data source selections

Configure Cable Fish				_		\times
Projected CRS WGS 84 / UTM zone 21N projected (32621)			-			
_ Input ———						
Latency 0.000	Latency 0.000 s					
Heading of cable	Guidance/	Fish to Chute/Azir	nuth			*
USBL beacon po	tion Beacons/B	31/Geo2D (WGS 8	34-4326)			•
Center chute pos	tion Vehicles/B	OAT/Offsets/Chut	e/Geo2D (WGS 8	84-4326) (W	orking)	*
КР	Guidance/	Chute->Forward/	Station			*
DCC	Guidance/	Chute->Forward/	Offline			*
				ОК	Car	ncel

Figure 3 Cable Fish Output Configuration



- c. The output message is terminated with <CR><LF>
- 5. Once configuration is complete click OK

1.4 Monitoring

- 1. Open a Device Status view (see the Devices section in the User Guide)
- 2. ASCII Decode Tab

Cable Fish		• ļ
ASCII Decode Data	à	
Rx Packets/Second 1.0		
Tx Packets/Second 1.0		
Rx Overflow 0.0		
 Data Transport Det 	ails	
Time	Data	
2025-03-27 19:51:28.0	CF,+01.3,11.2,14.6,-02.4,250.2,500000.001,3000000.002,500.55,123.53	
2025-03-27 19:51:27.4	$78,500000.37,3208485.42,500000.37,3208485.42,0.01120,500.55,19{:}51{:}26$	
2025-03-27 19:51:27.0	CF,+01.3,11.2,14.6,-02.4,250.2,500000.001,3000000.002,500.55,123.53	
2025-03-27 19:51:26.4	78,499996.17,3208483.96,499996.17,3208483.96,0.01120,500.55,19:51:25	
2025-03-27 19:51:26.0	CF,+01.3,11.2,14.6,-02.4,250.2,500000.001,3000000.002,500.55,123.53	
2025-03-27 19:51:25.4	78,499992.06,3208479.09,499992.06,3208479.09,0.01120,500.55,19:51:23	
2025-03-27 19:51:25.0	CF,+01.3,11.2,14.6,-02.4,250.2,500000.001,3000000.002,500.55,123.53	
2025-03-27 19:51:24.4	78,499992.06,3208479.09,499992.06,3208479.09,0.01120,500.55,19:51:23	
2025-03-27 19:51:24.0	CF,+01.3,11.2,14.6,-02.4,250.2,500000.001,3000000.002,500.55,123.53	
2025-03-27 19:51:23.4	77,499989.30,3208473.88,499989.30,3208473.88,0.01120,500.55,19:51:22	¥

Figure 4 Cable Fish Device Status View - ASCII Decode Tab

- a. Rx Packets/Second: Displays the input rate of the received messages
- b. Tx Packets/Second: Displays the output rate of transmitted messages
- c. Rx Overflow: Displays the number of bytes in the case of an input buffer flow
- d. Scrolling list of received (green) and transmitted (blue) messages
- 3. Data Tab
 - a. Displays the decoded and published data



Figure 5 Cable Fish Device Status View - Decoded and Published Data



- b. Selecting the top of the tree (e.g. Cable Fish) displays the decoded data in the right panel in the units and number of decimal places expected based on the documentation provided
- c. Expanding the branches in the tree (e.g., Altitude, Heading, etc.) lists the respective observation that are published and available for use elsewhere in NavView such as Text views and Data Recording

1.5 Input Telegram

Cable Fish CableFish Message to NavView				
Field	Format	Description		
1	CF	Message header		
2	+/-##.##	Pitch angle in degrees of survey head with positive being nose down (same as pitch angle of cable)		
3	##.##	Altitude in meters of survey head		
4	##.##	Depth in meters		
5	+/-##.##	Roll in degrees with starboard side down, looking in direction of touchdown		
6	##.##	Water depth in meters		
7	#######################################	Easting of the cable touchdown point in the respective WGS84 UTM zone		
8	#######################################	Northing of the cable touchdown point in the respective WGS84 UTM zone		
9	###.##	Layback in meters		
10	<cr><lf></lf></cr>	Carriage return Line feed		

1.6 Output Telegram

NavView to CableFish Message				
Field	Format	Description		
1	###	True heading in degrees of the cable		
2	#######	Easting of the cable touchdown point in the respective WGS84 UTM		
		zone		
3	######	Easting of the cable touchdown point in the respective WGS84 UTM		
		zone		
4	#######.#	Easting of the centre of the port chute,		
5	#######.#	Northing of the centre of the port chute		
	##.#	КР		
	##.#	DCC		
	hh:mm:ss	Time in UTC		
6	<cr><lf></lf></cr>	Carriage Return Line Feed		