+++++++++++++ --- 6666

#### **Minimum Requirements**

Outlined is a set of minimum requirements for all of the Training Masters as well as the Trainee in order to establish a baseline of experience and credentials, which will ensure that the quality of trainers and trainees is kept at a high standard. This program will consist of 4 basic sections:

1) Observation Time; 2) Light Boat Handling; 3) Ship Assist Work; 4) Final Sign Off

#### **Observation Time**

Observation time will serve as a formal orientation of the day-to-day operations of the tractor fug. This will be a time when the Training Master will demonstrate and explain the different techniques that are used to operate the tug. Once the requirements are met under the Observation Section, the trainee will be able to proceed to the next module.

#### **Light Boat Handling**

Light Boat Handling is set up with the intention of taking trainees through different evolutions in an order from the easiest to the most technical. These evolutions must be kept in the order that they are listed and the trainee may not skip a step during the check off process. It is very important that both training parties understand that if the Training Master is signing off on the evolution, this means that he feels that the Trainee has completed the evolution with 100% proficiency, without question. Light Boat Handling will incorporate four modules;

- 1) Open Water Training: This will allow the Trainee to incorporate the different techniques that were witnessed during the observation period and apply that to the general feel of the tractor tug. Open water means not in the direct vicinity (within 300') of any vessel or structure. This will be at the masters discretion.
- 2) <u>Close Quarters Training</u>: This will allow the Trainee to take the skills he has developed operating thus far and begin to get the feel of the Tractor Tug in closer quarters, or in the vicinity of other vessels, docks, buoys etc. The trainee will be brought through a more aggressive operating environment and will be expected to complete all the modules to the satisfaction of the Training Master.
- 3) <u>Incorporation of the Working Line and Winch:</u> This will add another dimension that must be learned and perfected to continue on to the next step. The Trainee will be expected to incorporate the function and operation of the winch aboard the tug. This must be accomplished by the Trainee without the help and assistance of the Training Master.
- 4) Emergency Maneuvering Training: The Trainee will be faced with numerous scenarios which factor in the loss of main propulsion and how to recover from this. Emergency systems and techniques will be introduced to the trainee and he will have to demonstrate full understanding and ability to use such resources.

Once the Light Boat Handling modules are completed and signed off the Trainee will be introduced to the Assist Training Section. All of the Training Masters and the General Manager of this division of ECO must approve the authorization of this step.

**Assist Training** 

In this chapter the Traince will be introduced to the numerous evolutions that we experience on a day-to-day basis during ship assist operations. There are four basic positions, with regards to the ships that we handle. Each of these positions requires several different techniques depending on placement of hull chocks, port or starboard side of ship, weather, desires of the pilot, etc. The Trainee will be required to be proficient in all the different elements of each individual position before advancing to the next position. The Trainee will need to execute 5 evolutions without the help or assistance of the Training Masters to be signed off on that position. Once the Trainee has proven to be proficient in each of the four positions, he will need to be signed off by at least 3 of the Training Masters and the General Manager of this division of ECO. It is very important that all parties understand that by signing the Trainee off on this step that he is 100% proficient in ship assist work. The final signing off and responsibility will be by ECO management.

#### **Section 1. Observation Time**

The objective of this section is to allow the Trainee to observe the Master during operating maneuvers. This time will allow the Master to define the basic Z-Drive fundamentals. The Trainee will be required to ride along and observe for a minimum of 20 Ship Assist Jobs.

NO.	Date	Tug	Po	Ship Name / Day or Night / Any Comments	M/I's
	2022		S.		
1	2-4	Gregory	4	Celcius Charlotte / Night / IB	F
2	2-5	Gregory	3	Mol Hastia / Night POB	
3	2-6	Gregory	2	Gustog Warsaw / Day ( IB	
4		Gregory	4	Celcius Charlotte/Day/08	
5	2-7	Greyort	2	Guslia Warsam / Night / OB	
6	2-8	6124014	4	Castilly de Coldelas / Night / IB	
7	2-9	Gregory	4	Castillo de Caldelas/ Day /OB	
8		Gregory	3	Aldamustos / Night / IB	
9	2-11	Gregory	3	Aldamastes / Night / OB	
10		Gregori	3	Maron Gas Andros / Day / IB	
11		Gregory	3	Maran Gus Andres / Night 10B	
12		Gregory	1	Coul Disc. Verner Day / IB	
13		Gregory	1	cool Disc. Verner/ Day 108	
14		Gregory	3	Hellac Athena / Night / IB	
15	2-16	Gregory	4	Bias Baixus Knutsen/ Night/IB	
16		Gregory	3	Hellus Athena/Night/OB	
17		Gregory	4	Bias Baixus Knatsen / Day / OB	
18	2-18	Gregory	2	Maran Gas Athena / Duy / IB	
19	2-19	Gregory	2	Maran Gas Athena / Night / OB	
20	2-19	61:4011	3	custino de Villal hu/Night/IB	

I hereby certify that the above jobs have been observed as documented above.

Trainee Name:	Timothy Thorsen		
Trainee Signature: Section 2. Light Boo	at Handling	Date:	//

### A. Maneuvering Light Boat (Open Waters)

Maneuver	Date	Tug	Comments	M/I's
Transverse Arrest/Stop Drag	2-23	Gregory		6
Slow Forward Motion	2-23	Gragory		6
Stop (Transverse Arrest)	2-23	Gregory		6
Slow Astern Motion	2-23	Gregory		0
Hold Course & Speed @ 25%	2-23	Comment		
Hold Course & Speed @ 50%	2-23	Gregory Gregory		
Hold Course & Speed @ 90%	2-23	Gregory		2
Stop & Hold Course (Fwd.)	2-24	6189014		4
Stop & Hold Course (Aft.)	2-24	Gregory		4
180* to Port & Starboard	2-24	Gregory		4
360* to Port & Starboard	2 - 26	6189014		
Walk to Port & Stop	2-24	(0/cg01-1		4
Walk to Starboard & Stop	2-26	Gregory		6
Walk at Different Angles	2-26	Gregory		6
Run Bow First & Hold Course	6-1	Arunsus		
and Speed (Assist #1 Position)	2-26	Coregory		

### B. Maneuvering Light Boat (Close Quarters)

Maneuver	Date	Tug	Comments	
Hold 10' off terminal pads and walk to port & starboard holding distance	2-26	Creyory		0
Hold 10' off and walk @ a 45* attitude for 300'	2-26	Gregory		4
Walk tug away from dock	2.26	Gregory		4
Bring tug to the dock	2-26	6 18 4011		0
Back away from pad, turn 90*, run ahead 3 pads, and re-approach 90*	2-26	(2184011		2
Back away from pad, turn 90*, run astern 3 pads, and re-approach 90*	2-26	6104011		4
Turn 180* keeping 200' from structure - both port & starboard	2-26	Gregory		4
Turn 360* keeping 200' from structure - both port & starboard	2-26	Greyory		4
Walk to port & starboard 1 pad length. Nose in and out 6 times	2-27	Gregory		4
Touch down A/S another tug - bit to	2-27	Gregory		6

		2
bit (5 times)	7.27 Gracos	/
Run A/S another tug @ 5' off. 3 k	ds. 2-27 6.004	
Run A/S another tug @ 5' off. 6 k	1s. 2.27 Gregar	
Run backwards in front of tug. 5		

C. Maneuvering Light Boat With Working Line & Winch

Maneuver	Date	Tug	Comments	M/l's
Nose up to a bit, hang working line and stretch it out 100', then retrieve the line	1/26	Gregory		
Nose up to a bit, hang working line and stretch it out 100', then retrieve the line	4/16	Gregory		
Nose up to a bit, hang working line and stretch it out 100', then retrieve the line	4/16	Gregory		
Stretch out line to 150'. Work tug to port & starboard, keeping the line tight, 5 times in each direction. Return to a 90* and retrieve the line	1/20	Gregory		
Stretch out line to 150'. Work tug to port & starboard, keeping the line slack, 5 times in each direction. Return to a 90* and retrieve the line	1/20	Gregory		

#### D. Emergency Maneuver Training

Maneuver	Date	Tug	Comments	M/I's
Running with just one engine <u>ahead</u> , maintain course at varying speeds while heading up or down the channel.	1/9/22	Gregory		
Running with just one engine astern, maintain course at varying speeds while heading up or down the channel.	4/9/22	Gragory		j
Operate the tug in the emergency steering mode at varying speeds while heading up or down the channel. Demonstrate the ability to make turns and steady up on a heading while in this mode.	1/28	Gregory		

### E. Lateral Maneuver Check Off

In this module the Trainee must demonstrate their ability to walk around a stationary object (ie: another tug boat), while maintaining a 90\* angle to the object. This needs to be completed all the way around the entire object while maintaining a constant 20' off the object. This will be executed revolving from both port and starboard directions.

		Tractor	rug Traninig i Tograni	
Con	nments: _			
Mas	sters Initia	als:	Date Observ	ved:/
Sec	tion 3. Sh	nip Assist Training		
Dur	ing Basic	_	(Sailings) hay only attempt evolutions that include the advice at this stage.	e following elements.
			(sunken bit). Traince operates until the polen bit). Traince operates until the point of	
	inees mus lution.	t complete 5 proficie	ent maneuvers of each element before adva	ancing to the next
Elei	ment 1. L	ine up on forward l	hull chock	
No.	Date	Tug	Comments	M/I's
1	4/16	Gregory	Cool Discoverer	6
2	4/29	Gregory	Adriano Knutsen	7
3	6/2	Arunsas	Fukurokuju	
4	6/9	Aranias	Ouslog Wellington	,
_ 5	6/20	Portland	Cool Discoverer	10
Elen	nent 2. L	ine up on aft hull ch	nock	_
No.	Date	Tug	Comments	M/I's
1	2/28	Gregory	Orion Seu	
2	111-		./ \ -	
	4/9	() reyord	Maria Enery	
3	7/9 4/11	Gregory	Maria Energy Fulcuso Kuju	9
3 4		Gregory	Fuleno Kuju  Gaslog Warson	
3		Greyory	Fulenio Kuju	

Comments: \_\_\_\_

Date:\_\_\_/ \_/\_\_\_

D

Masters Initials: \_\_\_\_\_

#### **Evolution #2. Basic Ship Assist (Arrivals)**

During Basic Training, Trainees may only attempt evolutions that include the following elements. Training Master may assist or give advice at this stage.

- 1) Line up on forward hull chock (sunken bit). Trainee operates until the point of turn.
- 2) Line up on aft hull chock (sunken bit). Trainee operates until the point of turn.

Trainees must complete 5 proficient maneuvers of each element before advancing to the next evolution.

Element 1. Line up on forward hull chock

No.	Date	Tug	Comments	M/I's
1	4/9	Coregoif	Maria Energy	a
2	4/16	Gregory	Global Scatine	C
3	4/20	bregory	Gaslog Warson	<u> </u>
4	6/1	Aransas	Fukuro kuju	
5	6/10	Arungas	Traiano Knutcen	

Element 2. Line up on aft hull chock

No.	Date	Tug	Comments	M/I's
1	4/27	Gregory	Adriano Knutsen	-
2	4/30	Grenory	Stena Blue Sky	•
3	5/2	bregary	Stene Crystal Sky	-
4	6/4	Aransas	Maria Energy	
5	6/2	Aransas	busley wellington	

Comments:		_	 		_
Masters Initia	als:		Date:/_	/	

### **Evolution #3. Basic Ship Assist (Sailings)**

During Basic Training, Trainees may only attempt evolutions that include the following elements. Training Master may assist or give advice at this stage.

- 1) Line up on forward hull chock (sunken bit). Trainee operates until completion of job.
- 2) Line up on aft hull chock (sunken bit). Trainee operates until completion of job.

Trainees must complete 5 proficient maneuvers of each element before advancing to the next evolution.

Element 1. Line up on forward hull chock Pos 2 08 Fell

No.	Date	Tug	Comments	M/I's
1	4-16	Grenory	Global Scaling	
2	4-29	Gregory	Steny Blue Sky	-
3	6-2	Aransas	Fukurokuju	
4	6-9	Aransas	Gaslug Wellington	
5	6-20	Portland	Coul Discoverer	,

### Element 2. Line up on aft hull chock

Pos 3 OB FULL

No.	Date	Date Tug Comments		M/I's
1	4/20	Gregort	Methune Jane Elizabeth	
2	4/25	Gregory	Gaslog Scattle	
3	5/1	Courses	Stena Blue Sky	7
4	5/2	breyor	La Mancha Knutsen	-
5	6/1	Aransas	Adriano Knutsen	-2

Comments:	<u> </u>			
Masters Initials:		Date:	_/	/

### **Evolution #4. Basic Ship Assist (Arrivals)**

During Basic Training, Trainees may only attempt evolutions that include the following elements. Training Master may assist or give advice at this stage.

- 1) Line up on forward hull chock (sunken bit). Trainee operates until completion of job.
- 2) Line up on aft hull chock (sunken bit). Trainee operates until completion of job.

Trainees must complete 5 proficient maneuvers of each element before advancing to the next evolution.

Element 1. Line up on forward hull chock

No.	Date	Tug	Comments	M/I's
1	4/20	bregord	Guslog Wersew	
2	61	Aransas	Fakurokuju	
3	6/10	Aransas	Traiano Knutsen	
4	6/13	Arungus	Gaslog Winchester	
5	6/18	Portland	Shinsha Mary	

### Element 2. Line up on aft hull chock

No.	Date	Tug	Comments	M/I's
1	4-27	Gregary	Adriano Knutsen	
2	5-1	Gregor	La Muncha Knutsen	-
3	5-2	Gregort	Stena Coystal Sky	
4	6-4	Aronsas	Maria Energy	
5	6-7	Arungas	Gaslog Wellington	

Comments:				
Masters Initials:	Date	/	/	

### **Evolution #5. Intermediate Ship Assist (Arrivals)**

During Intermediate Training, Trainees may only attempt evolutions that include the following elements. Training Master may assist or give advice at this stage.

- 1) Line up through bull nose (center lead, forward). Trainee operates until completion of job.
- 2) Line up on transom (center lead, aft). Trainee operates until completion of job.

Trainees must complete 5 proficient maneuvers of each element before advancing to the next evolution.

Element 1. Line up - Center Lead, Aft

Pos 4 IB

No.	Date	Tug	Comments	M/I's
1	6-3	Aransas	Castillo De Villalba	
2	6-15	Arunsas	Dinmond Gas Metropolis	
3	6-19	Portland	Celcius Charolette	_
4	6-24	Portland	Caslog Warsaw	9
5	6-28	Portland	Bw Favilian Leegra	-

#### Element 2. Line up - Center Lead, Forward

Pos 1 IB

No.	Date	Tug	Comments	M/I's
1	5-30	Aransas	Adriano Knutsen	
2	6.29	Portland	Orion Sea	4
3	87	Pokodoland.	Takarotenia	4
4				
5				

Comments:		
Masters Initials:	Date:/	_/

### Evolution #6. Intermediate Ship Assist (Sailings)

During Intermediate Training, Trainees may only attempt evolutions that include the following elements. Training Master may assist or give advice at this stage.

- 1) Line up through bull nose (center lead, forward). Trainee operates until completion of job.
- 2) Line up on transom (center lead, aft). Trainee operates until completion of job.

Trainees must complete 5 proficient maneuvers of each element before advancing to the next evolution.

Element 1. Line up - Center Lead, Aft

Pos 4 OB

No.	Date	Tug	Comments	M/I's
1	6-4	Aransas	Castillo De Villalba	
2	6-7	Aransas	T Energy	
3	6-14	Aransas	Gaslog Winchesfer	
4	6-25	Portland_	Gaslog Warsaw	9
5	7-2	Portland_	Celcius Canberra	

Element 2. Line up - Center Lead, Forward

Pos 1 08

No.	Date	Tug	Comments	M/I's
1	6-1	Arensas	Adriano Knutsen	
2	6-23	Portland	Cataluna Spirit	ζ.
3	6-30	Portland	Orion Seu	
4				
5				

Comments:				

Masters Initials:		Date:/	//	/
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### **Evolution #7: Advanced Ship Assist**

During the Advanced Training portion of this program the Trainee **must** demonstrate that he is completely proficient in all aspects of ship assist work and tug handling. This includes, but not limited to: a) winch operations, b) communications with the pilots, c) communications with deck crew, d) situational awareness. The sign off is only given if the Trainee can accomplish these tasks while completing the job from start to finish without any assistance or advice from the Training Master. Trainees must be signed off by at least 3 of the Training Masters. It is very important that all parties understand that by signing the Trainee off on this step that he is 100% proficient in ship assist work.

Element 1. Line up in hull chock, sunken bit, fwd. (3 Arrivals & 3 Sailings)

		105 2		
No.	Date	Tug	Comments	M/I's
1	6/13	Aransas	Guslog Winchester	
2	6/18	Portland	Shinshu Maru	
3	6/22	Portland	Catalunya	-
4	6/16	Portland	Diamond Gas Metropolis	-
5	6/20	Portland	Cool Discoverer	-
6	6/23	Portland	Catalunya Spirit	

Element 2. Line up in hull chock, sunken bit, aft. (3 Arrivals & 3 Sailings)

	No.	Date	Tug	Comments	M/I's
(	1	6-7	Arensus	Flex Endeavour busloy welling ton	1
1 8 2	2	6-26	Portland	Flex Endeavour	9
	3	8-4	Portland	Gaslog Galviston	
e 2	4	6-60	Arunsas	TEnergy	K
00 7	5	6-27	Portland	Flex Endenvour	9
	6	8-5	Portland	Gaslog Galviston	

### Element 3. Line up, center lead, aft. (3 Arrivals & 3 Sailings)

	No.	Date	Tug	Comments	M/I's
. A	1	6-24	Pottant.	Gaslon Wersow	4
5 }[	2	10-28	Portland	BW Pavilian Lecara	4
4	3				

([	4	6-7	Arensas	T Energy	
033	5	6-25	Purtland	Gaslog warson	3
	6	7-2	for Hand	Calcius Camberra	6

# Element 4. Line up, center lead, fwd. (3 Arrivals & 3 Sailings)

	No.	Date	Tug	Comments	M/l's
⟨[	1	6-29	Portland	Orion Seg	
B }[	2	8-7	Potestinal	Entero linia	
4	3			3	
(	4	6-23	Portland	Cataluna Spirit	
.a.2	5	6.30	Portland	Orion Sea	2
, s (  -	6				

### Section 4. Final Sign Off

This will be the last and final step of the Tractor Tug Training Program. This step requires the signature of the General Manager of the tug division. It is recommended that the General Manager ride along with the Trainee until he is 100% satisfied that said Trainee is qualified as a Tractor Tug Captain. Once this step is completed, it qualifies the Trainee, but does not guaranty, a position as a Tractor Tug Captain.

General Manager Name:	
General Manager Signature:	Date:/