

**K1070 INTERAGENCY AGREEMENT
BETWEEN
THE STATE OF WASHINGTON
Washington State Ferries
AND
Seattle Maritime Academy, Seattle Central College**

THIS AGREEMENT is made and entered into by and between the DEPARTMENT OF TRANSPORTATION, Washington State Ferries, hereinafter referred to as "WSF" and the Seattle Maritime Academy, Seattle Central College, hereinafter referred to as "SMA" pursuant to the authority granted by Chapter 39.34 RCW.

IT IS THE PURPOSE OF THIS AGREEMENT to provide: mutually beneficial simulation equipment and expertise to both WSF and SMA. The pooling of resources will enable both parties to achieve greater flexibility, increase the effectiveness of each of their training initiatives and reduce costs.

THEREFORE, IT IS MUTUALLY AGREED THAT: WSF will reimburse SMA for all equipment listed in the attachment B.

1. STATEMENT OF WORK

The WSF and SMA shall furnish the necessary personnel, equipment, material and/or service(s) work set forth in Attachment A (WSF/SMA - Memorandum of Understanding) & B (TRANSAS Proposal- Reference No.: 504261) attached hereto and incorporated herein.

2. PERIOD OF PERFORMANCE

Subject to its other provisions, the period of performance of this Agreement shall commence on the effective date, and be completed on September 1, 2021, unless terminated sooner or extended, as provided herein. The effective date will be based on the last signature date of this Agreement. This Contract's term may be extended by two (2) additional five (5) year term (s) provided that the extensions shall be at WSDOT's option and shall be effected by WSDOT giving written notice of its intent to extend this Contract to Vendor not less than ninety (90) calendar days prior to the then-current Contract term's expiration and Vendor accepting such extension prior to the then-current Contract term's expiration. No change in terms and conditions shall be permitted during these extension unless specifically agreed to in writing.

3. PAYMENT

Compensation for the work provided in accordance with this Agreement has been established under the terms of RCW 39.34.130. The parties have determined that the cost of accomplishing the work herein will not exceed three hundred and thirty-seven thousand seven hundred and thirty-five dollars (\$337,735). Payment for satisfactory performance of the work shall not exceed this amount unless the parties mutually agree to a higher amount. Compensation for services shall be based on the following rates or in accordance with the following terms, or as set forth in accordance with the budget in Attachment "B", which is attached hereto and incorporated herein.

a. SMA shall invoice WSF half the installed Transas equipment cost at the time of the initial Transas equipment installation setup at the SMA facility. (\$93,867.50 Transas Equipment + \$25,000.00 for Installation of wiring at SMA = \$118,867.50) SMA will perform an initial acceptance evaluation of the hardware/software simulator installation. The initial acceptance check list will accompany the initial invoice for payment by WSF.

b. SMA shall invoice WSF for the remainder of the Transas Full Mission Simulator Hardware/Software (\$93,867.50) after completion of the performance acceptance checklist listed as Attachment "C" to this Interagency Agreement. WSF will provide two evaluators for completion of this Check List. The final acceptance check list will accompany the invoice for final payment of the Transas Full Mission Simulator installed at SMA

c. SMA shall invoice WSF for annual maintenance and use fees at the end of the first year Warranty period in the amount of (\$73,750).

d. Maintenance and use fees in the amount of (73,750) shall be payable by WSF to SMA for the term of four years payable annually in contract term years 2-5. The Maintenance fees be inclusive of all service agreements made between SMA and Transas as outlined in Attachment C.

4. BILLING PROCEDURE

The SMA shall submit invoices as they are received and submitted to WSF's Training and Credential Manager. Payment to SMA for approved and completed work will be made by warrant or account transfer by the WSF within 30-days of receipt of the invoice. Upon expiration of the Agreement, any claim for payment not already made shall be submitted within 30-days after the expiration date or the end of the fiscal year, whichever is earlier. SMA will submit itemized invoices to Matt Hanbey at 2901 3rd Avenue, Suite 500, Seattle, WA 98121 with an electronic copy furnished to Joy Findley at FindleJ@wsdot.wa.gov

5. AGREEMENT CHANGES, MODIFICATIONS AND AMENDMENTS

This Agreement may be changed, modified or amended by written agreement executed by both parties.

6. ASSIGNMENT

The work to be provided under this Agreement, and any claim arising thereunder, is not assignable or delegable by either party in whole or in part, without the express prior written consent of the other party, which consent shall not be unreasonably withheld.

7. CONTRACT MANAGEMENT

The program manager for each of the parties shall be responsible for and shall be the contact person for all communications and billings regarding the performance of this Agreement.

The Program Manager for WSF is: Joy Findley, Training Manager, WSDOT, Ferries Division 3rd Ave, Suite 500, Seattle, WA 98121, (206) 515-3990

The Program Manager for SMA is Sarah Scherer, SMA 4455 Shilshole Ave NW, Seattle WA, 98107, (206) 934-2905

The Contract Administrator for WSF is Tim Carroll, Transportation Engineer, WSDOT, PO Box 47408, 98504, (360) 705-7595

8. DISALLOWED COSTS

The Contractor is responsible for any audit exceptions or disallowed costs incurred by its own organization or that of its Subcontractors.

9. DISPUTES

In the event that a dispute arises under this Agreement, it shall be determined by a Dispute Board in the following manner: Each party to this Agreement shall appoint one member to the Dispute Board. The members so appointed shall jointly appoint an additional member to the Dispute Board. The Dispute Board shall review the facts, agreement terms and applicable statutes and rules and make a determination of the dispute. The Dispute Board shall thereafter decide the dispute with the majority prevailing. The determination of the Dispute Board shall be final and binding on the parties hereto. As an alternative to this process, either of the parties may request intervention by the Governor, as provided by RCW 43.17.330, in which event the Governor's process will control.

10. GOVERNANCE

This Agreement is entered into pursuant to and under the authority granted by the laws of the state of Washington and any applicable federal laws. The provisions of this Agreement shall be construed to conform to those laws.

In the event of an inconsistency in the terms of this Agreement, or between its terms and any applicable statute or rule, the inconsistency shall be resolved by giving precedence in the following order:

- a. Applicable state and federal statutes and rules;
- b. Statement of work; and
- c. Any other provisions of the agreement, including materials incorporated by reference.

11. INDEPENDENT CAPACITY

The employees or agents of each party who are engaged in the performance of this Agreement shall continue to be employees or agents of that party and shall not be considered for any purpose to be employees or agents of the other party.

12. RECORDS MAINTENANCE

The parties to this Agreement shall each maintain books, records, documents and other evidence which sufficiently and properly reflect all direct and indirect costs expended by either party in the performance of the services described herein. These records shall be subject to inspection, review or audit by personnel of both parties, other personnel duly authorized by either party, the Office of the State Auditor, and federal officials so authorized by law. All books, records, documents, and other material relevant to this Agreement will be retained for six years after expiration and the Office of the State Auditor, federal auditors, and any persons duly authorized by the parties shall have full access and the right to examine any of these materials during this period.

Records and other documents, in any medium, furnished by one party to this agreement to the other party, will remain the property of the furnishing party, unless otherwise agreed. The receiving party will not disclose or make available this material to any third parties

without first giving notice to the furnishing party and giving it a reasonable opportunity to respond. Each party will utilize reasonable security procedures and protections to assure that records and documents provided by the other party are not erroneously disclosed to third parties.

13. RIGHTS IN DATA

Unless otherwise provided, data which originates from this Agreement shall be "works for hire" as defined by the U.S. Copyright Act of 1976 shall be owned by WSF. WSF shall maintain ownership rights to all work products created or developed for this Agreement. Data shall include, but not be limited to, reports, documents, pamphlets, advertisements, books magazines, surveys, studies, computer programs, films, tapes and/or sound reproductions. Ownership includes the right to copyright, patent, register and the ability to transfer these rights.

14. INTELLECTUAL PROPERTY

Intellectual Property that is developed under this Agreement, ownership shall be determined under applicable federal or state law, including Chapter 26, US Code Title 35 and will be disclosed to the WSF. Intellectual Property shall mean any invention, copyright trademark or proprietary information. SMA shall not obtain or attempt to obtain patent coverage on WSF-provided materials or information, without the express consent of WSF.

15. CONFIDENTIAL INFORMATION

Confidential Information shall mean any WSF provided materials, written information and data marked "Confidential" or non-written information and data identified at the time of disclosure as confidential, reduced to writing and transmitted to SMA within sixty (60) days of such non-written disclosure. It shall not include information in the public domain, or independently known or obtained by SMA. To the extent allowed by law, SMA will use the same degree of care it uses to protect its own confidential information.

16. TRADEMARKS

Neither party will use the name or other trademark of the other party in any publicity, advertising, or news release without prior written approval of the authorized representative of the other party.

17. SEVERABILITY

If any provision of this Agreement or any provision of any document incorporated by reference shall be held invalid, such invalidity shall not affect the other provisions of this Agreement, which can be given effect without the invalid provision if such remainder conforms to the requirements of applicable law and the fundamental purpose of this agreement, and to this end the provisions of this Agreement are declared to be severable.

18. SAVE HARMLESS

SMA shall indemnify and hold harmless the WSF from all claims, costs, damages, or expenses arising out of the negligence of SMA. Likewise, the WSF shall indemnify and hold harmless SMA from all claims, costs, damages, or expenses arising out of the actions of the WSF. In the case of negligence of both the WSF and the SMA, any damages allowed shall be levied in proportion to the percentage of negligence attributable to each party.

18. TERMINATION

Either party may terminate this Agreement upon 90-days' prior written notification to the other party. If this Agreement is so terminated, the parties shall be liable only for performance rendered or costs incurred in accordance with the terms of this Agreement prior to the effective date of termination.

19. TERMINATION FOR CAUSE

If for any cause, either party does not fulfill in a timely and proper manner its obligations under this Agreement, or if either party violates any of these terms and conditions, the aggrieved party will give the other party written notice of such failure or violation. The responsible party will be given the opportunity to correct the violation or failure within 15-working days. If failure or violation is not corrected, this Agreement may be terminated immediately by written notice of the aggrieved party to the other.

20. WAIVER

A failure by either party to exercise its rights under this Agreement shall not preclude that party from subsequent exercise of such rights and shall not constitute a waiver of any other rights under this Agreement unless stated to be such in a writing signed by an authorized representative of the party and attached to the original Agreement.

21. ALL WRITINGS CONTAINED HEREIN

This Agreement contains all the terms and conditions agreed upon by the parties. No other understandings, oral or otherwise, regarding the subject matter of this Agreement shall be deemed to exist or to bind any of the parties hereto.

IN WITNESS WHEREOF, the parties have executed this Agreement.

STATE OF WASHINGTON
~~Joy Findley~~ Elizabeth Kosa
DEPARTMENT OF TRANSPORTATION
WSDOT, Ferries Division
3rd Ave, Suite 500, Seattle, WA 98121



Signature

Chief of Staff

Title

9/19/16

Date

STATE OF WASHINGTON
Bruce Riveland
SEATTLE CENTRAL COLLEGE
For Seattle Maritime Academy
4455 Shilshole Ave NW, Seattle, WA
98107



Signature

SARAH SCHERER ON BEHALF
OF BRUCE RIVELAND

DIRECTOR/ASSOC. DEAN

Title

9/19/16

Date

APPROVED AS TO FORM:

ATTORNEY GENERAL'S OFFICE

ATTACHMENT A

SEATTLE CENTRAL COLLEGE SEATTLE MARITIME ACADEMY

MEMORANDUM OF UNDERSTANDING

This Agreement is entered into between Seattle Maritime Academy at Seattle Central College, a unit of Seattle Colleges, agencies of the State of Washington (hereinafter referred to as the "SMA") and Washington State Ferries (hereinafter referred to as the "WSF").

PURPOSE: The purpose of this agreement is to provide mutually beneficial Full Mission Navigation Bridge and Engine Room simulation equipment, hardware and software and expertise to both WSF and SMA. The pooling of resources will enable both parties to achieve greater flexibility, increase the effectiveness of each of their training initiatives and reduce costs.

A. SMA AND WSF JOINTLY AGREE

1. To discuss new regulatory requirements and if both parties agree to purchase hardware and software upgrades needed to meet those requirements.
2. To agree upon an annual projected schedule by September 1st for the following Calendar Year. Both parties agree changes to the submitted annual schedule may be requested, as far in advance as possible, preferably 180 days in advance. The changes will be scheduled in cooperation with SMA if the changes do not conflict with prescheduled sessions.
3. Enter into an interagency agreement for SMA to purchase Full Mission Bridge Navigation simulation hardware and software as specified in Attachment B from Transas and get reimbursed from WSF.
4. Indemnity: As between SMA and the WSF only, each of these two parties agrees to be responsible for damages to persons or property resulting from the negligent acts or omissions on the part of itself, its employees, or its officers. Neither of the two parties to this Agreement assumes any responsibility to the other part for the consequences of any act or omission of any person, firm, or corporation not a party to this Agreement. Additionally, and also for the purposes of this Agreement only, neither of the two parties to this Agreement shall be considered the agent of the other party.

B. SMA AGREES

1. To provide WSF priority scheduling in SMA simulators for up to 60 days each year using no more than two weeks per month for up to 18 students per day.
2. Additional simulation days (> 60 days), will be charged at a rate equal to the "at cost" building system cost. If an SMA instructor is requested during these extra simulation days, WSF will be charged salary and benefits for that instruction. SMA will provide an estimate to WSF prior to providing the instructional services.
3. To provide one Full Mission Bridge Simulator including Instructor Control Station and monitors.
4. To provide one Full Mission Machinery Operations (Engine Room) Simulator including Instructor Control Station and monitors.

5. To provide 18 desk top Machinery Operations limited task Simulator Stations plus one Instructor Control Station and monitors.
6. To provide a Simulator Operator for each simulation day WSF performs Navigation or Engine Room Simulation Instruction .
7. To share all software area and models purchased by SMA and used on the simulation system. SMA will provide WSF with any simulation scenarios or other instructional materials created for and used by WSF.
8. To purchase items for the expansion of the SMA bridge simulator to support WSF's simulation needs as listed in attachment B of interagency agreement and to be reimbursed by WSF as per payment terms specified in the Interagency Agreement
9. To maintain WSF security measures of their vessels and terminals,
 - a. SMA will only use WSF vessel models with WSF employee unless otherwise approved by a WA DOT Approving Authority.
 - b. SMA will not use/show the "terminal portions" of any area simulation models with persons other than WSF employees.
10. Insurance: All Seattle College District VI employees, officers, and agents are protected against claims based on their negligence while acting as agents of the state and/or Seattle College District VI. This protection is provided by the State of Washington Self-Insurance Program and the Tort Claims Act (RCW 4.92.070). Claims or judgments against the state, its employees, and/or its agents will be paid from the Revolving Trust Fund as provided in RCW 4.92.130.

C. THE _WSF AGREES

1. To pay SMA beginning at the opening of the simulator:
 - a. Year 1: \$25,000 for wire pulls for the additional computers and the full build out of the simulator bridge
 - b. Year 2 – 5: \$73,750 reduced rate usage fee
2. To provide 80 hours of training for SMA employees on WSF navigational equipment and operational procedures.
3. To provide WSF's USCG approved Radar and ECDIS course material to be used at SMA's discretion.
4. To reimburse SMA for the purchase of simulation equipment for the expansion of the bridge simulator as listed in attachment 1 of this agreement as per the interagency agreement between SMA and WSF.
5. To submit an annual projected Full Mission Bridge Navigation & Engine Room Simulator Training Schedule to SMA schedule for use of the by September 1st for the following calendar year.
6. To provide software to make any future controls or equipment, in addition to attachment B, provided by WSF compatible with Transas software as installed at SMA. Any additional hardware not in this agreement is the responsibility of SMA or whomever provided the equipment to SMA.
7. To share all WSF software route areas and WSF vessel models to be used in the simulation systems.
8. WSF will provide their own instructors during WSF simulation exercises. If SMA instructors are requested by WSF, SMA will charge salary and benefits, for the current academic year, for that instruction beyond the annual fee. SMA will provide an estimate to WSF prior to providing the instructional services.
9. Any additional education or room rental outside of the simulation days will be negotiated separately from this contract.

10. Insurance Requirements: WSF shall at all times during the term of this affiliation, at its cost and expense, carry and maintain general public liability insurance, against claims for bodily injury, personal injury, death, or property damage occurring or arising out of services provided under this agreement. This insurance shall cover such claims as may be caused by any act, omission, or negligence of the Training Site or its officers, agents, representatives, or assigns. The limits of liability insurance which may be increased from time to time as deemed necessary by the State, shall not be less than as follows:

General Aggregate Limits \$2,000,000

Each Occurrence \$1,000,000

Such insurance policy or policies shall not be reduced or canceled without sixty (60) days prior written notice. Written proof of such insurance shall be provided upon request.

D. NONDISCRIMINATION

Compliance with Civil Rights Laws: The parties hereby agree that no person shall, on the grounds of age, race, creed, color, sex, religion, national origin, or sexual orientation be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under this Agreement or under any project, program or activity supported by this Agreement.

E. TERMINATION

This Agreement may be terminated by either party at the end of the term of contract, with 90 days written notice. WSF will maintain rights to all Navigation software products, per the Interagency Agreement provided all navigation models, scenarios, and any other instruments of service used by WSF instruction on the SMA Full Mission Simulators. If the agreement is terminated or not renegotiated after the 5 year agreement all equipment will owned, remain at and be managed by SMA.

F. MODIFICATION

This Agreement may be modified at any time in writing by the mutual consent of the parties.

G. TERM OF AGREEMENT

Subject to Section E above, the term of this Agreement is 5 years. SMA and WSF will be prepared to renegotiate the Memorandum of Understanding at this time. Two 5 year extensions are an option for this agreement.

H. APPLICABLE LAW AND VENUE

The law of Washington State shall apply to this Agreement and to all actions arising out of this Agreement. Venue for any action shall be King County, Washington.

WASHINGTON STATE FERRIES

Elizabeth Kosa

Name

Signature

Chief of staff

Title

9/19/16

Date

SEATTLE MARITIME ACADEMY SEATTLE
CENTRAL COLLEGE

SARAH L. SCOTTER

Name

Signature

DIRECTOR/ASSOC. DEAN

Title

9/19/16

Date

**WSF Navigation Simulator Expansion for Seattle Maritime Location
Washington State Ferry System**

SUMMARY

Expansion of SMA Proposed Bridge 1 for WSF	\$132,935
Addition of NTPro to Existing Classroom (x8)	\$54,800
Total Price	\$187,735

Description	Part Number / Ref.	QTY	Supply	Unit Price	PRICE (USD)
Expansion of SMA Proposed Bridge 1 for WSF					
Software Modules					
Independent Binocular view	TR-S-NTP4-OSB-SW41	1	Transas	\$4,500	\$4,500
Software interface modules for Furuno equipment	TR-S-NTP4-OSB-SW41	1	Transas	\$4,000	\$4,000
Consoles					
Additional Bridge console unit	TR-HW-NTP4-CON	1	Transas	\$4,000	\$4,000
Misc design and plates	TR-HW-NTP4-CON	1	Transas	\$2,500	\$2,500
PC Hardware, Tasks	Transas Type 4	2	Transas	\$2,250	\$4,500
IBID Control Panels					
IBID Tasks Software	Custom Development	11	Transas	\$500	\$5,500
Hardware Controls and Interfaces					
Rudder angle indicators		2	Transas	\$1,950	\$1,950
IBID touch screen control panel 8.4" (Tasks)		3	Transas	\$1,950	\$5,850
Joystick (visuals)		1	Transas	\$250	\$250
Hardware interfaces	WAGO	1	Transas	\$5,000	\$5,000
Sound signals control button		1	Transas	\$250	\$250
Misc installation equipment		1	Transas	\$1,000	\$1,000
Transas Simulated VHF Module	TR-S-NTP4-OSB-SW34	1	Transas	\$400	\$400
USB Audio Unit	TR-S-TGS-DHW06	1	Transas	\$395	\$395
Handset	TR-S-TGS-DHW07	1	Transas	\$495	\$495
IBID touch screen control panel 8.4" (VHF)		1	Transas	\$1,950	\$1,950
Overhead display software	TR-S-NTP4-OSB-SW44	1	Transas	\$4,500	\$4,500
Overhead panel hardware		1	Transas	\$2,950	\$2,950
Navigational Aids software, PC and display	TR-S-NTP4-OSB-SW21	1	Transas	\$6,745	\$6,745

WSF SUPPLY					
CCTV equipment for monitoring bridge 1 and 2		1	WSF	WSF	WSF
Existing WSF area models (PMI developed)	TBD	1	WSF	WSF	WSF
Existing WSF vessel models (PMI developed)	TBD	1	WSF	WSF	WSF
Bridge 1 - Throttle controls		1	WSF	WSF	WSF
Bridge 1 - Steering Tillers		2	WSF	WSF	WSF
Furuno MFD and interface units		Var	WSF	WSF	WSF
Visualization and Sound System					
Vis 6000 visualization channels	TR-S-NTP4-OSB-SW41	6		\$8,000	\$48,000
65" display	Identical to SMA	6		\$3,500	\$21,000
PC Hardware, Visualization	Transas Type 4	3		\$2,250	\$6,750
Sound system		1		\$450	\$450

Sub Total: \$132,935

Addition of NTPro to Existing Classroom (x8)					
Classroom Stations x 18					
Standard configuration D - to Include:	TR-S-NTP4-STD-SW02	8		\$4,200	\$33,600
Conning Display Software	TR-S-NTP4-OSB-SW01	1			\$0
Transas Radar/Arpa software	TR-S-NTP4-OSB-SW03	1		\$0	\$0
Transas Navi-Sailor 4000 ECDIS-I	TR-S-NTP4-OSB-SW40	1		\$0	\$0
Conning Visualization Channel Module (Vis 6000)	TR-S-NTP4-OSB-SW42	1			\$0
PC Hardware	Transas Type 4	8		\$2,000	\$16,000
Desktop Hardware Controls					
Reduced Set of Controls to Include:	VR Insight Modified	8	Transas	\$650	\$5,200
Lever Steering (Single)		1	Transas	\$0	\$0
Throttles (Dual)		1	Transas	\$0	\$0
Control Buttons (Set)		1	Transas	\$0	\$0
USB Interface Device/Scripting		1	Transas	\$0	\$0

Sub Total: \$54,800

COMMERCIAL TERMS

Transas standard terms and conditions apply.


Pricing is in US Dollars and is valid through 7/30/2016.

Delivery terms - ex Works INCOTERMS 2000, 12 weeks for hardware components.

Payment terms: 30% upon order, 50% upon delivery of equipment, Balance upon installation

Warranty: One year Software, One year Hardware; extended warranty available

Documentation provided in English.

		PROPOSAL / SPECIFICATIONS				
		Project:	Engineering and Navigation Simulator Complex			
		Customer:	Seattle Colleges (Seattle Maritime Academy)			
Doc.-ID:	Section 1 Technical	Project ID:	US-SIM-068	Customer ID:	SMA	Ref. № 504261
				Page 1 of 3		

1.10 TRANSERV Simulation maintenance, support and system upgrade program (RFP ref: C 1, j)

With our extensive field experience and significant volume of installations, and in collaboration with our friends and partners at training institutions across the globe, Transas has developed a comprehensive, flexible and customisable simulator maintenance and development program called “TRANSERV”.

The program consists of a number of individual options, with a goal of offering the customer the maintenance, support, warranty and upgrade services to meet specific objectives and budgets. The program allows customers to predict and manage more effectively the budget for their simulator programs with the peace of mind of knowing that the system will remain state of the art, and in good working order, for many years to come. The customer is also able to take advantage of new Transas software developments and keep up with new or potential changes in National and International simulator standards.

The program is implemented using our worldwide network of service offices, through our global hub structure. Our on-going investments in the training and certification of our resources in more than ninety countries, enables us to provide system support at the highest possible level.

A TRANSERV agreement can be commenced at any stage of a projects lifecycle, with the initial contract, after system acceptance, on completion of the initial warranty period, or as required to meet a customer’s specific needs. Flexible term lengths are available, from a single year to five years or more.




With the Transas operational headquarters for the Americas located conveniently in Bothell, less than an hours drive from downtown Seattle, and with a full staff of fully qualified simulation technicians available at that site (currently nine persons), Transas is uniquely qualified to provide the highest level of quality support to SC/SMA, 24 hours a day, seven days a week, 365 days a year.

Full details of the available standard TRANSERV services can be found in Annex 5.

1.10.1 Operating and Maintenance Cost Estimate


The table below (table 1) details the estimated operational and maintenance costs recommended by TRANSAS for the proposed SCCC simulators, over an initial warranty year, followed by a five year TRANSERV maintenance program.



		PROPOSAL / SPECIFICATIONS				
		Project:	Engineering and Navigation Simulator Complex			
		Customer:	Seattle Colleges (Seattle Maritime Academy)			
Doc.-ID:	Section 1 Technical	Project ID:	US-SIM-068	Customer ID: SMA	Ref. No 504261	Page 2 of 3

Description	Warranty period	Year 1	Year 2	Year 3	Year 4	Year 5	Comments
i.SOFTWARE UPDATES							
Updates = patches and service packs for licensed versions, for all systems delivered under this contract.	Included	Included	Included	Included	Included	Included	
ii. EQUIPMENT REPLACEMENT							
Transas hardware and consoles	Included	NR	NR	NR	NR	NR	No replacements assumed required
PC LCD Displays	Included	NR	NR	NR	NR	NR	No replacements assumed required
Large screen displays	Included	NR	NR	NR	NR	NR	
PC replacement (Approx. 50 total)	Included	NR	\$25,000	\$35,000	\$25,000	\$25,000	New server and network equipment in year 3 or 4
Third party equipment	Included	NR	NR	NR	NR	NR	
Estimated annual replacements for repair	Included	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	General fund to be used for any required replacements due failure outside of warranty
iii. REMOTE TECHNICAL SUPPORT							
Live support	Included	\$3,000	\$3,000	\$3,000	\$3,000	\$3,000	Connection costs and VPN maintenance to be covered by customer IT Dept.
Priority support	Included						
Telephone support (incl. out of normal business hours)	Included						
Email support	Included						
Remote access facility Internet online support via VPN link (not including VPN maintenance or connection)	Included						
Feedback and developments	Included						
Information Service	Included						
iv. ON-SITE TECHNICAL SUPPORT							
Labor Service charges (contract related - Transas) to include Annual on-site maintenance visit	Included	\$4,250	\$4,250	\$12,750	\$4,250	\$4,250	Travel days and travel costs included as support staff are in Seattle.
Guaranteed Labor Rate	Included	Included	Included	Included	Included	Included	\$850 per day for additional services reqd.
Pickup, delivery, transportation or other charges associated with repairs or services	Included	Included	Included	Included	Included	Included	
Invitation to Simulation Technical Support training Class (Annual)	Included	Included	Included	Included	Included	Included	Expenses for travel etc. to be covered by customer



		PROPOSAL / SPECIFICATIONS				
		Project:	Engineering and Navigation Simulator Complex			
		Customer:	Seattle Colleges (Seattle Maritime Academy)			
Doc.-ID:	Section 1 Technical	Project ID:	US-SIM-068	Customer ID: SMA	Ref. № 504261	Page 3 of 3

Description	Warranty period	Year 1	Year 2	Year 3	Year 4	Year 5	Comments
v. ON SITE TRAINING FOR NEW EMPLOYEES							
Training Days – 5 per year, Instructor, operational, or technical	Included	\$4,250	\$4,250	\$4,250	\$4,250	\$4,250	Assumes five days of any form of training required per year.
vi. ANNUAL CLASSIFICATION SOCIETY CERTIFICATION (SIMULATOR SOFTWARE)							
Manufacturers software certification of all simulators provided with classification society	Included	Included	Included	Included	Included	Included	
vii. SUPPORT TECHNICIAN IN SEATTLE WA							
Transas certified technician available in Seattle	Included	Included	Included	Included	Included	Included	Nine currently available.
viii. SOFTWARE UPGRADES							
Upgrade of all simulator systems	N/A	N/A	N/A	50,000	N/A	N/A	One time upgrade proposed in year three.

SUMMARY							
TOTAL ESTIMATED PRICE PER YEAR	Included	\$16,500	\$16,500	\$16,500	\$16,500	\$16,500	
OPTIONAL SOFTWARE UPGRADE IN YEAR 3, AND PC REPLACEMENT BY TRANSAS	Included	\$0	\$25,000	\$93,500	\$25,000	\$25,000	

1.11 WARRANTY

Transas will provide a 12 month warranty on all Transas supplied items, from date of final system acceptance.

In addition, Transas will provide TRANSERV services as detailed in table 1 of section 1.10.1 of this proposal. This includes;

- Software updates
- Equipment replacement
- Remote technical and operational support
- On-site technical support
- On-site training for new employees (up to 5 days)
- Manufacturers annual classification society certification of simulation software
- Support technician in Seattle



**Reassurance that the Furuno Radars will Operate
in the system & is part of SMA's Installation Costs**

As per an e-mail from Timothy Parks, Transas Monday, August 22, 2016 2:59 PM

As statement that ensures WSF that:

- a. The installation cost of the Radar/ECDIS units is part of our installment and there will be no additional charge. **Installation of WSF supplied equipment IS included within the Scope of the Quote. Statement to be sent as a separate document.**
- b. The maintenance of the radar and ECDIS will be included in our maintenance package for the whole system. **Maintenance of the WSF supplied equipment is included with the proposed maintenance contract as far as installation and operation goes. Hardware warranty will NOT be assumed by Transas. That will be a Furuno issue. Statement of this will be sent as separate document.**
- c. If there is additional equipment to make it compatible to the simulation system that we have it and it is or is not an extra charge? Ensure in writing that the outside equipment will work with the simulator as discussed. **The Interface equipment (DSP-NOR Skanfaker and NMEA Moxa unit) IS included within the quotation to WSF/SMA. It will NOT incur a separate charge.**

Attachment C - 2
Simulator Maintenance Explanation from Tim Parks, Transas

As Sarah requested, I'd like to provide you with a brief, but hopefully clear, indication of what the "extended" maintenance contract that we offered to SMA would entail. Obviously, the entire system is covered under the standard warranty for the first year following installation, so I'll concentrate on what we call "Transerv" extended maintenance which would occur for the four years following that period.

First, I'll address the security issue as that's an easy one. As you are likely familiar with during your time at Boeing, the simulation system will never be connected to the internet. It is a closed system. We might install a gateway VPN (virtual private network) device for remote access but only our technical engineers will have access to that, and it would only be plugged in for remote troubleshooting, not left attached. Each type of computer will be imaged after the installation with the files provided to SMA and another copy retained in our office. In the event a computer failure occurs, that image will be able to be used to quickly restore the operating system, particularly on the server. Unlike the sims you might have experienced before, we actually install nothing on the majority of PCs within the system. Our system has what we refer to as the TRN Network that when activated, will "tell" the system what each computer is supposed to do during runtime and send out the appropriate tasks. In this way we are able to run two distinctly separate programs on the same server, in this case our NT Pro Navigation and ERS simulators.

All USB ports are typically disabled within the simulator system with the exception of one or two on the Instructor station for local file backup. Students will not be able to stick in a USB stick or external drive to the machines that they are using, expecting to do anything. (we have some experience with that particular issue, sadly)

Now, for what we call Transerv:

In our experience, customers sometimes invest a significant amount of money in a simulation system but neglect to think about follow on maintenance and updates over the lifetime of that system. As an example, one particular customer of mine, Northeast Maritime, purchased a system in 2007 and has done nothing to that system since installation. That is fine and dandy as the system that we installed is still running well, with no hardware failures and is satisfying their training needs. Unfortunately for them, Transas is not going to stop our development utilizing new technology and sometimes that new technology is not compatible with older systems. Again, if the training needs are being met, so be it, but if that particular school needs functionality that we've developed, then they are stuck with a rather expensive (and often unplanned) upgrade with generally little planning time.

To avoid that, we try to get our customers to keep their systems up to date with the latest version of software and to think about replacing computers after a certain period of time. Seattle Maritime is, in my opinion, is planning wisely to avoid issues down the road. What we have proposed within our Transerv maintenance proposal is the following:

- Updates and patches to the current installed level of software, yearly
- Annual maintenance and "tune-up" visit each year for as many days as necessary
- Remote and onsite technical support as needed, yearly
- Currency training for instructors for 5 days each year. This becomes particularly important if there is turnover in Instructor Staff and more so as we update software versions.

- We've proposed a "general fund" for miscellaneous hardware replacement that is not under warranty (displays, dedicated control hardware, etc....)
- PC replacement in the third year after standard warranty expires. This will include all PC hardware in the system but does not include displays (large or small)
- A complete software upgrade to latest version in the third year after standard warranty (to coincide with PC replacement)

Because a one-time expense for this can be a tough nut to swallow, the proposed contract has been broken up over the course of 4 years following the standard warranty. Overall, it will keep Seattle Maritime (and presumably WSF) on the leading edge of technology with no "surprises" down the road. Because technology changes so quickly, we typically don't implement Transerv past five years into the future, but the program is certainly renewable past that, perhaps with some adjustments.

Attachment D

Transas Simulator Acceptance of Equipment & Operational Checklist



SITE ACCEPTANCE TEST

for

Navi Trainer Pro Bridge

On

October, 3-6th 2016

By

Gregg Ferrando

Representing

Transas Americas Inc.

And

Mark Picket

Representing

Seattle Maritime Academy

This document contains Site Acceptance Tests (SAT) for the following items:

- All Bill of Materials Items
- Transas Navi Trainer Professional 5000 software modules
- Ship
- Visualization exercise areas
- Vessel mathematical models
- Third party items

Each test consists of a Bill of Materials, a list of items to be tested, a PRESENT check box to indicate that the item is present, an ACCEPT check box to indicate that the item has been accepted and a COMMENT area for indicating deficiencies that must be corrected. Blank pages have been included at the end of each test for comments that exceed the space provided in the SAT itself. In this case, the written comment should be numbered and the number should be written into the corresponding COMMENT area of the SAT table.

Each SAT should be performed to the extent deemed necessary and sufficient for sign-off. The Test Conductor, Contractor Witness and Customer Witness may elect to omit portions of any SAT that they feel have been sufficiently covered by other tests. The Customer Witness has final say on the level and depth of testing for each item.

If a test item fails acceptance, the remainder of the test should be completed if possible. Failed items will be corrected as soon as possible so that they can be re-tested.

A three signature sign off area follows each SAT. Upon successful completion, the Test Conductor, Contractor Witness and Customer Witness should sign and date the test.

Instructors Station x1

□ Main Components:			
▪ 1 each Type 2 PC's w keyboards and mice	✓	✓	
▪ 1 each Type 4 Pc's	✓	✓	
▪ 3 each 23 inch LCD Monitors	✓	✓	
▪ 1 each 32 inch LCD Monitor	✓	✓	
▪ 1 each Sim VHF Handset	✓	✓	
▪ 1 each Panasonic Phone System	✓	✓	
▪ 1 Set CCTV Monitoring and Recording Hardware	✓	✓	
Misc. Items			
Set of NS PRO 5000 documentation, Installation and specification manual, Instructor manual, trainee manuals	✓	✓	
Exercise area descriptive HTML files	✓	✓	
Set of Technical documentation	✓	✓	
Dongle	✓	✓	
Ship Models			
Ship Models from Transas Library	✓	✓	
Exercise Areas			
Exercise Areas from Transas Library	✓	✓	
Debrief Station			

□ Main Components:			
▪ 1 each Type Small Format PC's	✓	✓	
▪ 1 Large Format Display	✓	✓	

▪ 1 Set Bluetooth Keyboard and Mouse	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
--------------------------------------	-------------------------------------	-------------------------------------	--

Nav Bridge

Bills of Materials	Present	Accept	Comments
Full Mission Ship Simulator			
Maneuvering/Conning Station/ECDIS			
1 each Conning Display Station Software	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
1 each ECDIS Software NS-4000	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
1 each 1400 mm Conning Console	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
2 each 24vdc Power Supplies	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
5 each 8.4 inch IBID Displays	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
1 each EOT Lilaas LF-120D	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
1 each Thruster Control Lilaas LF-90D	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
1 each Set Z-drive controls Lilaas LF-70	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
1 each Set Voith Schneider Controls	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Two NFU Levers Kobelt 7071	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
1 each Conning/ECDIS PC	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
1 each Conning Display	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
1 each ECDIS Display	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
2 each Corner Console Bridging Units	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
1 each Sim VHF	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
1 each Panasonic Phone	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
1 each Pilot Plug	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	

Radar / ARPA Station #1			
1 each ARPA/Radar Stimulation Software	✓	✓	
1 each Radar Stimulation PC	✓	✓	
1 each 800 mm Console	✓	✓	
Radar / ARPA Station #2			
1 each ARPA/Radar Simulation Software	✓	✓	
1 each Radar Stimulation PC	✓	✓	
1 each 800 mm Console	✓	✓	
Overhead Panel			
1 each IBID Overhead Panel	✓	✓	
Visualization Channels			
15 each Visualization Channel Software	✓	✓	
15 each 65" Samsung Displays	✓	✓	
1 each Display Control Software	✓	✓	

PART 2 - NT-PRO 5000 SOFTWARE MODULES

INSTRUCTOR WORKPLACE (x1)

☐ **Main features:**

	Present	Accept	Comments
▪ Integrated application for exercise preparation and monitoring	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
▪ Multiple windows for simultaneous preparation & monitoring of several exercises	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
▪ Vector chart presentation	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
▪ Area zooming, panning, focusing on selected object	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
▪ Exercise creating, editing, saving and loading	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
▪ Pre-play exercise in normal & fast time modes	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
▪ Special window for object properties and faults setting / monitoring	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
▪ Measuring units selection window	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
▪ Exercises start time setting	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
▪ Displaying of the actual ship contours	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
▪ Displaying of object tracks: contour or point with selectable resolution, track history and time stamp	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
▪ Displaying of walls and piers	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
▪ Displaying of true or relative speed vectors	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
▪ Selectable display mode: true motion, relative motion, head up, north up	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
▪ Use of a mouse wheel for chart center and scaling	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
▪ Adjusting of ship model characteristics: hydrodynamic and mechanical interaction	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	

☐ **Exercise objects:**

▪ Ships (6 DOF models)	✓	✓	
▪ Tugs (6 DOF models)	✓	✓	
▪ Barges (6 DOF models)	✓	✓	
▪ Traffic ships	✓	✓	
▪ Helicopter target	✓	✓	
▪ SAR objects: Life raft, MOB, damaged tanker, SART,	✓	✓	
▪ Mooring objects: CALM, SALM, bollard, offshore drilling platform	✓	✓	
▪ Land objects: radar station, watch tower. - visual and radar presentation	✓	✓	
▪ Global and local weather zones: wind, current, sea state, visibility, precipitations	✓	✓	
▪ Rain clouds	✓	✓	
▪ External tide and current data (Navi-Sailor databases)	✓	✓	
▪ Fixed depth zones (closed area with specified depth)	✓	✓	
▪ Buoys: The ability to move , hide and turn on and off lights	✓	✓	
▪ Bollards	✓	✓	
▪ Bridges configuring (assignment of simulated equipment to bridge);	✓	✓	
▪ Assignment of ships to bridges	✓	✓	
▪ Start time setting	✓	✓	
❑ Exercise control and monitoring:			
▪ Multiple exercises run, pause/resume, stop	✓	✓	
▪ Individual and joint voyages	✓	✓	
▪ Setting nav. equipment parameters and faults: radar, GPS, Loran C, Log, Gyro, Echo Sounder, UAIS (After exercise loading)	✓	✓	

▪ On-chart monitoring of own ships and targets: Ship info panel, CPA-TCPA panel, Events panel	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
▪ On-chart control of own ships and targets: direct control of steering and propulsion systems, autopilot, mooring lines, anchors	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
▪ On-chart control of tugboats in automatic mode	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
▪ Setting faults of nav. equipment, steering and propulsion system, fire and general alarm	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
▪ Setting of exercise weather and bathymetric conditions: global and local zones, importing tide and current databases (Navi-Sailor	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	

<input type="checkbox"/> Control of own ship equipment faults, errors and input of failures for:			
▪ Main engine and auxiliary equipment faults	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
▪ Steering system faults including autopilot	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
▪ Navigational instruments: Gyro error and fault, log error and fault, echo sounder error and fault	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
▪ GPS faults and errors: power failure, number of satellites, dilution of precision	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
▪ Loran-C faults and errors: power failure, stations fault, ASF, SNR unsteady readouts, sky radio wave, poor signal values	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
▪ ARPA/Radar faults and errors: radar fault, ARPA fault, radar interference, receiver noise, hide targets, indirect and multiple echoes, blind sectors	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
<input type="checkbox"/> Exercise logging system:			
▪ Continuous logging of data: histories of ownships, tugs, target's positions, control parameters, equipment failures	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
<input type="checkbox"/> Replay of recorded exercise data on chart both in real time and fast time	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
<input type="checkbox"/> Replay of recorded exercise data on bridge both in real time and fast time	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	

OWNSHIP BRIDGE – Conning Station

☐ **Conning display information/controls (permanently displayed information blocks):**

	Present	Accept	Comments
▪ Steering: rudder controls and indicators, RoT, Gyro and Magnetic compass	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
▪ Double Engine controls, RPM, Pitch, thrusters controls, air pressure indicator	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
▪ Twin screw conventional tug control panel (Independent steering levers for PS and SB nozzles)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
▪ Tug controls (Independent pitch levers for PS and SB drives), VS	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
▪ Instruments: log, Doppler log, time, wind, current, distance run, depth	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
▪ Visualization and view sector controls	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
▪ Light and sound controls	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
▪ Autopilot course indicator and controls	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
▪ Autopilot auto-track mode	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	

☐ **Conning display 'Call-up' pages (displayed 1 each at a time):**

▪ Pilot Card and maneuvering characteristics	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
▪ Steering panel (Gyro/Magnetic compass, steering wheel, rudder angle and RoT analog indicators, NFU tiller, steering mode selector, pumps controls and indicators, dimmer)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
▪ Autopilot panel	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
▪ Engine panel (Throttle controls, RPM & pitch indicators, bow and stern thrusters controls and indicators, start air pressure indicator, engine controls and indicators, dimmer)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	

<ul style="list-style-type: none"> Alarm panel (Portside and Starboard Engine failure indicators: OverLoad, Cool.T.High, Cool.P.Low, Exhaust T.High, Scav.Fire, Oil Mist., OverSpeed, Lub.Oil P.Low, Turn Gear, Reverse Fail, Start Air P.Low, System Error, Too Long Start; Steering System failure indicators: Pump1 Failure, Pump2 Failure, Standby Failure, Pump1 Overload, Pump2 Overload, Standby Overload, Power Failure, Control Failure, Pressure Reduction; Panel control: Alarm Ackn., Buzzer Off, Lamp Test, Reset, Dimmer) 	✓	✓	
<ul style="list-style-type: none"> Sound controls, Navigational lights and shapes controls 	✓	✓	
<ul style="list-style-type: none"> Anchors controls & indicators, Doppler log 	✓	✓	
<ul style="list-style-type: none"> Echo sounder recorder 	✓	✓	
<ul style="list-style-type: none"> Gyro recorder 	✓	✓	
<ul style="list-style-type: none"> Mooring display and controls (for anchors, mooring lines, tug lines, winches, scalable chart with all ships) 	✓	✓	
<ul style="list-style-type: none"> Help page 	✓	✓	
<input type="checkbox"/> Sound simulation:			
<ul style="list-style-type: none"> Own ship sounds (whistle, gong, bell, automatic cycling) 	✓	✓	
<ul style="list-style-type: none"> Sounds from traffic ships and other objects 	✓	✓	
<ul style="list-style-type: none"> Engine noise and others 	✓	✓	
<ul style="list-style-type: none"> Environment noises (wind, etc.) 	✓	✓	

VISUALIZATION SOFTWARE			
	Present	Accept	Comments
<input type="checkbox"/> Performance:			
▪ Channel resolution 1920x1080	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
▪ Scene update rate of up to 30 Hz (depends on the scene content, resolution and HW platform)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
<input type="checkbox"/> Visual scene content:			
▪ Sky: sky type and visibility are under instructor control	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
▪ Sea: 3D textured wave	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
▪ Sea: Vessel bow waves and wake, depending upon vessel speed	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
▪ Sea: Vessel wake, depending upon propeller pitch and revolutions	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
▪ Terrain features: 3D mountains, hills, etc. combined with photographic textures	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
▪ Berths with mooring bollards	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
▪ Lights: app. navigational lights and cultural lights simultaneously visible	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
▪ 3D texture aids to navigation	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
▪ 3D texture cultural objects	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
▪ Targets: app. 30 detailed targets can be displayed simultaneously	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
▪ Detailed own ship bow with polygons and photographic texture	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
▪ Mooring & tug lines in strain and slack conditions	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
▪ Dynamic objects (cranes, cars, trains, wind mills, lock gates of docks, coast and ship radar antennas etc.)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
▪ Real time generation of visual scenes with own ships, traffic ships, cultural objects, environmental effects, visibility and illumination effects	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	

▪ Visual conditions: entire range from day through dusk to night, from clear visibility through haze to thick fog and all combinations	✓	✓	
▪ Rain effect	✓	✓	
▪ Whitecaps	✓	✓	
▪ Helicopter Objects	✓	✓	
▪ Reflection of Sky, sun, clouds	✓	✓	
▪ Adjustable sea water coloration	✓	✓	
▪ Illumination: Objects are seen appropriately according to the time of the day, distance from ownship, level of visibility & sun position	✓	✓	

ARPA/RADAR SIMULATION SOFTWARE			
	Present	Accept	Comments
<input type="checkbox"/> Radar parameters			
▪ operating frequency (S-band, X-band)	✓	✓	
▪ antenna rpm (20 – 48 RPM)	✓	✓	
▪ directivity pattern width (vertical and horizontal)	✓	✓	
▪ antenna height	✓	✓	
▪ blind sectors	✓	✓	
<input type="checkbox"/> Instructor Controlled Effects			
▪ display of multiple echoes	✓	✓	
▪ display of indirect echo	✓	✓	
▪ interference from other radars	✓	✓	
▪ increased receiver noise	✓	✓	
▪ visibility of targets	✓	✓	

▪ turning on/off of video signal	✓	✓	
▪ turning on/off of ARPA	✓	✓	
<input type="checkbox"/> Signal			
▪ Direct, Indirect and multiple echoes	✓	✓	
▪ Coast and coastal objects	✓	✓	
▪ RACON, SART	✓	✓	
▪ Rain and sea echo	✓	✓	
▪ Echo from ownship structures	✓	✓	
<input type="checkbox"/> Effects			
▪ attenuation of signal with distance	✓	✓	
▪ Shadow effect	✓	✓	
▪ transmitting power	✓	✓	
▪ pulse length	✓	✓	
▪ repetition frequency	✓	✓	
▪ radar sea clutter suppression	✓	✓	
▪ radar rain clutter suppression	✓	✓	
▪ video boost	✓	✓	
▪ interference rejection	✓	✓	

OWNSHIP BRIDGE – Transas Navi-Sailor 4000 ECDIS for NTPRO MODULE

❑ Main features:

▪ Transas TX97 (vector)	✓	✓	
▪ Multi-chart loading (up to 6 simultaneously)	✓	✓	
▪ Chart scaling, zoom in/out, auto load, etc.	✓	✓	
▪ User selectable chart layers, color palettes...	✓	✓	
▪ Information on chart and all chart elements	✓	✓	
▪ Chart correction capability	✓	✓	
▪ Tide and current	✓	✓	
▪ Route planning and monitoring, track control	✓	✓	
▪ Anti-grounding alarms: approach to navigational dangers, special areas, safety contours, etc.	✓	✓	
▪ Off-track alarms: XTE violation, WP and WOP approach, deviation from sailing schedule, etc.	✓	✓	
▪ Anti-collision alarms: CPA/TCPA, target loss, etc.;	✓	✓	
▪ Trial maneuvering module.	✓	✓	

❑ Databases included:

▪ Tide levels (world-wide database);	✓	✓	
▪ Tidal and surface currents (world-wide database);	✓	✓	

NT-PRO 5000 Additional Comments Page

Please number comments and write numbers into corresponding comment blocks above.

Test Conductor

Name: Gregg Ferrando

Signature:

Date:

Customer Witness

Name:

Signature:

Date

Customer Witness

Name:

Signature:

Date

Transas Americas
18912 North Creek Parkway
Suite 100
Bothell, WA 98011 USA



phone: +1 425 486 2100
fax: +1 425 486 2112
sales@transasusa.com
www.transas.com

18 September, 2016

Ms. Sarah Scherer
Director, Seattle Maritime Academy
Seattle Central College
4455 Shilshole Avenue NW
Seattle, WA 98107

Ms. Scherer,

We confirm it is the intention of Transas Americas, upon receipt of a Purchase from your office referencing Transas Project ADM-TUS-A-00002 (Software Escrow Quotation), to immediately begin the process of placing the Transas Navi-Trainer Professional 5000 Navigation Simulator software into escrow.

The Navi-Trainer Professional 5000 software placed into escrow will be the version of software installed within your facility (including patches) at the Site Acceptance Test.

The terms of the escrow agreement will be concluded between Transas and the Seattle Maritime Academy.

As per the quotation issued to your office, the escrow agreement will be valid for a period of five (5) years from the date of execution of with our provider. All costs of implementing the escrow agreement shall be borne by the Seattle Maritime Academy. Extension of the escrow agreement may be negotiated subject to extension of the proposed Transerv Software Maintenance contract previously discussed.

Transas Americas hopes that this letter of intent fulfills the requirements specified by your customer, Washington State Ferries. We would be obliged if you would acknowledge acceptance and receipt of this letter by signing below and returning a copy to us.

Yours Sincerely,

A handwritten signature in blue ink, appearing to read "Neil Bennett", written over a horizontal line.

Mr. Neil Bennett
Vice President
Transas Americas

A handwritten signature in blue ink, appearing to read "Sarah Scherer", written over a horizontal line.

Ms. Sarah Scherer
Director
Seattle Maritime Academy



Transas Americas, Inc.

18912 North Creek Parkway
Bothell, WA 98011
Tel: 425 486 2100
Fax: 425 486 2112

Attachment E2
Escrow Invoice

Date: 13-Sep-16

PC: ADM-TUS-A-00002
Q001

Price Quotation - Software Escrow Agreement
For Seattle Maritime Academy/Washington State Ferries

SUMMARY

Five Year Software Escrow Account

Total Price \$17,300

Description	Part Number / Ref.	QTY	Supply	Unit Price	PRICE (USD)
Services Transas					
Three Party Escrow Administrative	Custom	1	TAM	\$3,550	\$3,550
Services Escrow Account (Annual Fees)					
Deposit Account Fee	Custom	5	TAM	\$1,500	\$7,500
Beneficiary Enrollment Fee	Custom	5	TAM	\$1,250	\$6,250

Sub Total: \$17,300

COMMERCIAL TERMS

Transas standard terms and conditions apply.

Pricing is in US Dollars and is valid through 12/15/2016

Delivery terms - Escrow Account will be established within two months of Site Acceptance Test

Payment terms: 100% upon order, net 15

Validity of Account- Five years from deposit of Software into Escrow Account

Documentation provided in English.

Scherer, Sarah

From: Riveland, Bruce
Sent: Friday, September 16, 2016 1:09 PM
To: Scherer, Sarah
Cc: Cahan, Rachel; Flath, Deneva
Subject: RE: Urgent - Final Interagency Agreement Signature

I hereby delegate my signature authority to you for this one contract. Sign it, "Sarah Scherer on behalf of Bruce Riveland".

Please sign two copies, have them counter sign both and save one for us.

Bruce Riveland

From: Scherer, Sarah
Sent: Friday, September 16, 2016 11:54 AM
To: Riveland, Bruce <Bruce.Riveland@Seattlecolleges.edu>
Cc: Cahan, Rachel <Rachel.Cahan@seattlecolleges.edu>; Flath, Deneva <Deneva.Flath@seattlecolleges.edu>
Subject: RE: Urgent - Final Interagency Agreement Signature

Thank you for sending this to me electronically.

I just found out that I need the original for them (WSF) to sign. They are going to come over in the afternoon.

Can you have it sent over in the intercampus mail for first thing on Monday? If not I can come over and get it first thing in the morning on Monday.

What is the best way to get it here on Monday morning?

Thank you,

Sarah Scherer, MA

Director/Associate Dean
Seattle Maritime Academy
Seattle Central College
206.934.2647 O | 206.934.2905 D | 206.390.0002 C
sarah.scherer@seattlecolleges.edu



**SEATTLE CENTRAL
COLLEGE**

Seattle Maritime Academy

From: Riveland, Bruce
Sent: Friday, September 16, 2016 7:43 AM
To: Scherer, Sarah <Sarah.Scherer@Seattlecolleges.edu>
Cc: Cahan, Rachel <Rachel.Cahan@seattlecolleges.edu>
Subject: RE: Urgent - Final Interagency Agreement Signature

