FATS/STS Schedule 3 (Tasking Order Form)

DRAFT/FINAL/AMENDMENT/UOR (DELETE AS APPROPRIATE)

Tasking Identification	ation							
Unique Tasking Order Number		NBCC/00102		Version No. & Date		V4. 00/4.0/004.5		
		(Insert additional 9 characters Max)				V1 08/10/2015		
		Original FBC5543		l	Unique Reference Number			
FATS Business Case N	umber	Amendment FBC (FATS team supplied)		Number		N/A		
Project / Equipment for task is in support	which	SHIPLIFT			UOR	N/A		
Task Title	VARIOU	JS – SEE ATTACHED S	TATEMEN	TS OF	REQUIREMENT			
NCAs Selected (in	NCA <u>N</u>	Numbers: Items 1 &	§ 2 - 3160, 3	540, 37	10			
accordance with MKM search)		Items 3 -	Items 3 – 6 – 3190, 3540, 3710					
Please refer to FATS C	ustomer G	iuidance for definition of Wo						
Directorate & PT / Organisation Title	I III II D DI J GO I COI II II COI		Supplier	Name	AMEC Foster Wheeler Nuclear Ltd			
PT Leader/ Project Manager	David Gillespie			Post	Rich Lock			
Post	FDM1		Ac	ddress	Booths Park			
Address	Room	1/5			Chelford Road			
	Napier	Building			Knutsford			
Faslane								
Postcode	G84 8HL		Pos	stcode	WA16 8QZ			
Telephone / Fax No	01436674321 7897		Telephone	e / Fax No	01565 684518			
E-mail		NBCC-DHI-TA- 11@mod.uk		E-mail	rich.lock@amecfw.com			
UIN & RAC	N4127B and PVA007		CPV	/ Code	71356300-1			

Date Draft Tasking Order Issued	Deadline for Authority's receipt of Tenderer's response to the Draft Tasking Order	

UIN & RAC N4127B and PVA007

1. Schedule of Requirements

Brief summary of requirement – expand/delete rows as appropriate (full details appear below in the Statement of Requirement)

Item No	Description	Firm Price £ (Ex VAT)
1	Maintain shiplift Modelling Capability Against Current and Future Safety Case Requirements	£19,104.42
2	Review Shiplift Cradle Capper Categories with a View to Increase Capper Life	£6,653.00
3	Review SD Angeline Design Specification and the Palfinger 1800A Stability Book and Amend the TR Appendices	£26,095.25
4	Review and Update of TR 3410 – Shiplift Platform – Cooling Water System Performance and Hazard Withstand	£25,936.09
5	Update, Modify and Re-Run Loss of Seawater FTA within TR 3411	£89,931.15
6	Update TR 3411 to Reflect new Pump Specification	

2	Orde	r Co	nditi	one
~ . '	Olue	-	HUILI	ULIS

All conditions of the framework shall apply as supplemented by the terms selected below. The two sets of conditions become a binding contract at the time of signature on the Schedule.

· ·	
Type of Contract	
Competitive	
Competitive Award Criteria & Weightings	
Reverse Auction used?	
For Reverse Auction advice and support contact DefComrclCC-RevAuct@mod.uk	
Single Source	
General Conditions	

General Conditions			
DEFCON 624 (Edn 04/10) – Use of Asbestos in Arms, Munitions or War Materials		DEFCON 603 (Edn 10/04) – Aircraft Integration and Clearance Procedure	
DEFCON 176A (Edn 06/08) - MOD Requirements For Competition In Subcontracting (Non-Competitive Main Contract)		Additional Conditions A sheet is to be attached detailing any conditions that have been added	
<u>c</u>	hoose one	of the following:	
DEFCON 92 (Edn 08/90) – Failure of Performance		DEFCON 514 <i>(Edn 08/15)</i> – Material Breach	

Special Indemnity Conditions					
DEFCON 661 (Edn 10/06) – War Risk Indemnity					
DEFCON 661A (Edn 05/02) - War Indemnity Risk (Alternative Version)					
DEFCON 684 (Edn 01/04) – Limitation (upon Claim	in Respect of Aviation Products			
DEFCON 638 (Edn 12/08) – Flights Liab	oility and Inc	demnity			
Pricing Conditions Required					
Firm Priced at Outset (this applies to all ta	asks other tha	an by exception)			
For single source tasks valued below £	25M, the foll	owing conditions shall apply:			
DEFCON 127 (Edn 12/14) – Price Fixi	ng Conditio	n for Contracts of a Lesser Value			
DEFCON 812 (Edn 12/14) – Single So	urce Open	Book			
DEFCON 815 (Edn 04/15) – Contract contracts	Pricing State	ement – Single Source Non-qualifying			
Exceptionally, if other than Firm Priced at Outset (include additional conditions in attachment & complete Appendix 4)					
Payment Terms Use of P2P and Payment on Completion	are the defa	uit			
DEFCON 522J (Edn 05/03) – Payment Under P2P (If applicable attach completed Form 522A)		DEFCON 693 (Edn 04/06) – Government Procurement Card			
Intentionally Blank		Milestone/Stage Payments (see DEFCON 649 (Edn 07/99) below)			
Intentionally Blank DEFCON 649 (Edn 07/99) – Vesting (applicable to Tasks with deliverables where provision has been made for milestone/Stage payments in advance of completion)					
DEFCON 5J (Edn 07/99) – Unique Identifiers DEFCON 129 (Edn 07/08) – Packaging (For Articles other than Ammunition & Explosives)					
Alternative Payment Arrangements Required (Where payment cannot be made through the MOD invoice payment department (eg for tasks placed by other Government departments), please provide full details of the payment procedure to be followed, as an attachment to this tasking form)					

Milestone/Stage No	Key Deliverable	Due Date	%	Value £k (ex VAT)
Work Package 1	Technical Note	Jan 2016		£19,104.42
Work Package 2	Technical Note	Nov 2015		£6,653.00
Work package 3	Updated TR Appendices	Dec 2015		£26,095.25
Work Package 4	Updated TR3410	Dec 2015		£25,936.09
Work Package 5 Work Package 6	Updated TR3411	Mar 2016		£89,931.15
FINAL (Payment should be subject to a reasonable retention based on % of total cost)	Satisfactory delivery of all work under the contract			£167,719.91

Intellectual Property Rights

Completion of this section is <u>mandatory</u>. Select the appropriate condition(s) by ticking the boxes below after consulting FTS/STS Customer Guidance or with DIPR, if appropriate. In the event that no boxes are ticked in this section (Intellectual Property Rights), all intellectual property generated under the Task shall be subject to the terms of DEFCON 703.

DEFCON	Tick As Applicable		Tasking Order Line Item (tick as appropriate)					
If DEFCON 703 does not apply then select either:								
DEFCON 705 (Edn 11/02)		All	The following Item Nos. only (insert below)					
		<u>OF</u>	<u>3:</u>					
DEFCON 14 (Edn 11/05), 15 (insert edition that applies) 21 (insert edition that applies), 126 (Edn 11/06) & DEFFORM 315		All	The following Item Nos. only (insert below)					
DEFCON 14 (Edn 11/05), 16 (Edn 10/04), 21 (insert edition that applies) & DEFFORM 315		All	The following Item Nos. only (insert below)					
DEFCON 14 (Edn 11/05), 90 (Edn 11/06) & 126 (Edn 11/06)		All	The following Item Nos. only (insert below)					
DEFCON 14 (Edn 11/05), 91 (Edn 11/06) & 126 (Edn 11/06)		All	The following Item Nos. only (insert below)					

Other, as specified in a special IPR condition to be applied to the Tasking Order	All		The following Item I	Nos. only	(insert below)			
No intellectual property conditions appl DIPR before ticking this box).	y (refer to							
Issue of Government Stores								
DEFCON 23 (Edn 08/09)* – Special Jig	DEFCON 23 (Edn 08/09)* - Special Jigs, Tooling and Test Equipment							
Controlled Information								
Issue of Controlled Information (subject	t Condition	50 of S	chedule 1)					
(if ticked then list Controlled Information ar	nd attach lis	st to Tas	sking Form)					
Payment of Customs Duty – select of	ne box o	nly						
DEFCON 619A (Edn 09/97) - Customs Duty Drawback		Issue	of Certificate in accil) Regulation 15		ce with EU			
Progress Reports								
If ticked, progress reports must utilise to current version of DRRS Format Stand Scientific and Technical Reports Prepartitle United Kingdom Ministry of Defence	lards for ared for		DEFCON 642 (Edn 06/97) – Progress Meetings		Frequency required			
Brief Description								
Transport – select one box only								
DEFCON 621A (Edn 06/97) – Transport (if the Authority is responsible for transport)			ON 621B (Edn 10 ontractor is respor					
Liquidated Damages applicable? (Refer to Condition 46 of Schedule 1)								
Task Item 1 £		•	/month up to a ma					
Task Item 2 £ per day/week/month up to a maximum of £								
Task Item 3 £ per day/week/month up to a maximum of £								
Force Majeure								
Maximum period of extension of time in	Maximum period of extension of time in the case of a Force Majeure Event							
Quality Assurance Conditions According to the product or scope of the work to be carried out, the Contractor shall meet the requirements of:								
AQAP 2110 – NATO Quality Assurance Requirements for Design, Development and Production								

Deliverable Quality Plan requirement	s						
DEFCON 602A (Edn 12/06) - Quality Assurance with Quality Plan		DEFCON 602B (Edn 12/06) - Quality Assurance without Quality Plan					
AQAP 2105 – NATO Requirements for Delivering Quality Plans							
Software Quality Assurance requiren	nents	·					
AQAP 2210 – NATO Supplementary Sc 2110	oftware C	Quality Assurance Requirements to AQAP					
Air Environment Quality Assurance	requirem	nents					
Def. Stan. 05-100 – Ministry of Defence Authorised Flight and Ground Running issued aircraft is a requirement of the T	(Mandate	ements for Certification of Aircraft for ory where flying and/or ground running of					
Relevant MAA Regulatory Publications	(See atta	chment for details)					
Additional Quality Requirements (See a.	ttachmen	t for details)					
Warranty							
Express Warranty (See attachment for details) Warranty – remedies implied by general law							
Security							
DEFCON 659 (Edn 06/09) – Security Measures (Applies to all contracts classified 'Confidential' or above to be placed with a UK Contractor – attach Security Aspects Letter if appropriate)							
3. Price							
TOTAL CONTRACT PRICE	<u> </u>	TYPE OF PRICING					
£167,179.91	FIDM						
4. Authority Tasking Order Commercial Officer Authorisation							
Name SUSAN MCGOWAN							
Position CLYDE COMMERCIA	Position CLYDE COMMERCIAL MANAGER						
Signature Susan NCC	Signature Susan McCowan .						
Date 08/10/2015	ate 08/10/2015 Telephone Number 01436 674321 Ext 7040						

5.	5. Acknowledgement by supplier									
	Name									
	Position									
	Signature									
	Date	Telephone Number								

6. Record of Authorised Changes

CHANGE ISSUE NUMBER	DATE OF ISSUE	COMMENTS / REASON FOR CHANGE

7. Final Administration

Where the output of any research or study is a Technical Report, the Report is to be completed in accordance with the current version of the ATHENA Defence Research Reports Specification - 'Format Standards for Scientific and Technical Reports Prepared for the United Kingdom Ministry of Defence'. MOD Customers may obtain this document via the www.dstl.gov.uk. **The Contractor** shall send a copy of the report on CD ROM in unlocked pdf.format to:

Dstl Knowledge & Information Services, Bldg 247, Dstl Porton Down, Salisbury Wilts SP4 0JQ. Tel: 01980 613971

Any staff on DII can search the ATHENA system via the online science gateway to ascertain if particular research or a study already exists. Access can be requested utilising a password (supplied) via this link: http://osg.dstl.r.mil.uk/SignIn/SignIn.aspx/

On receipt of the order acknowledgement from the Contractor, the **Authority's Commercial Manager (who placed the task)** must send a copy of the acknowledged final tasking order form together with a completed DEFFORM 57 AND DEFFORM 111 (Edn 07/12) to:

DGFM-FMSSC Walker House Exchange Flags Liverpool L2 3YL

A copy of the acknowledged final tasking order form must be sent by the **Authority's Commercial Manager (who placed the task)** electronically to the FATS team at the following address:

DEFComrclCC-FATSCases@mod.uk

However, if this is not possible, please send a hard copy to:

DEF Comrcl CC/FATS Cases Maple Level 0 #2031 MOD Abbey Wood South Bristol BS34 8JH

Appendix 1 to Schedule 3 (Tasking Order Form) - DEFFORM 111

DEFFORM 111 (Edn 08/15)

Appendix - Addresses and Other Information

1. Commercial Officer

Susan McGowan, Room 316, Lomond Building, HMNB Clyde, Faslane, Helensburgh, G84 8HL

Email: dessmcomrcl-clyde-ccm2:mod.uk

8. Public Accounting Authority

- 1. Returns under DEFCON 694 (or SC equivalent) should be sent to DBS Finance ADMT Assets In Industry 1, Level 4 Piccadilly Gate, Store Street, Manchester, M1 2WD

 ★ 44 (0) 161 233 5397
- 2. For all other enquiries contact DES Fin FA-AMET Policy, Level 4 Piccadilly Gate, Store Street, Manchester, M1 2WD

 ★ 44 (0) 161 233 5394

2. Project Manager, Equipment Support Manager or PT Leader

(from whom technical information is available) David Gillespie, Napier Building, HMNB Clyde, Faslane, Helensburgh, G84 8HL

Email: NAVY NBCC-DHI TA DSCM11 (Gillespie, David C2)

9. Consignment Instructions

The items are to be consigned as follows:

3. Packaging Design Authority

(Where no address is shown please contact the Project Team in Box 2)

10. Transport. The appropriate Ministry of Defence Transport Offices are:

A. <u>DSCOM</u>, DE&S, DSCOM, MoD Abbey Wood, Cedar 3c, Mail Point 3351, BRISTOL BS34 8JH

Air Freight Centre

IMPORTS © 030 679 81113 / 81114 Fax 0117 913 8943 EXPORTS © 030 679 81113 / 81114 Fax 0117 913 8943 Surface Freight Centre

IMPORTS **2** 030 679 81129 / 81133 / 81138 Fax 0117 913 8946

EXPORTS **2** 030 679 81129 / 81133 / 81138 Fax 0117 913 8946

4. (a) Supply / Support Management Branch or Order Manager:

Tel No:

(b) U.I.N.

B. <u>JSCS</u>

JSCS Helpdesk No. 01869 256052 (select option 2, then option 3)

JSCS Fax No. 01869 256837 www.freightcollection.com

5. Drawings/Specifications are available from

11. The Invoice Paying Authority (see Note 1)

Ministry of Defence

2 0151-242-2000

DBS Finance

Walker House, Exchange Flags

Fax: 0151-242-2809

Liverpool, L2 3YL

Website is:

https://www.gov.uk/government/organisations/ministry-ofdefence/about/procurement#invoice-processing

6. For contracts containing DEFCON 5, mauve Copies of MOD Form 640 are to be sent to

(where no address is shown the mauve copy should be destroyed)

12. Forms and Documentation are available through *:

Ministry of Defence, Forms and Pubs Commodity Management PO Box 2, Building C16, C Site

Lower Arncott

Bicester, OX25 1LP (Tel. 01869 256197 Fax: 01869 256824)

Applications via fax or email: DESLCSLS-

OpsFormsandPubs@mod.uk

7. Quality Assurance Representative:

Commercial staff are reminded that all Quality Assurance requirements should be listed under the General Contract Conditions.

AQAPS and DEF STANs are available from UK Defence Standardization, for access to the documents and details of the helpdesk visit http://dstan.uwh.diif.r.mil.uk/ [intranet] or https://www.dstan.mod.uk/ [extranet, registration needed].

NOTES

- 1. Forms. Hard copies, including MOD Form 640 are available from address in Box 12., All other invoicing forms e.g. AG Forms 169 and 173, are available from the website address shown at Box 11.
- 2.* Many **DEFCONs** and **DEFFORMs** can be obtained from the MOD Internet Site:

https://www.aof.mod.uk/aofcontent/tactical/toolkit/index.htm

Appendix 2 to Schedule 3 (Confidentiality Agreement)

The provisions of this Clause are supplemental to DEFCON 531

- 1 Both DEFCON 531 and the provisions of this Clause apply to:
 - (A) This Tasking Order;
 - (B) Any Information disclosed by either party prior to the issue of a draft Tasking Order and in contemplation of Work being placed by the Authority under a Tasking Order; and
 - (C) Any Task placed under this Agreement, provided that Information provided to a party for the purpose of tendering for a Tasking Order shall only be used for that tendering purpose, and Information provided to a party for performing a Task placed on it under this Agreement shall only be used for the performance of that Task.
- 2 Subject to its requirements of continued access to Information necessary to exercise its rights of disclosure and use hereunder including under any Tasking Order, and to the obligations set out herein in respect of any Controlled Information (Definition in Clause 42 Schedule 1), the recipient of any Information shall:
 - (A) Upon the expiry or termination of the Agreement; or
 - (B) Upon the expiry or termination of any Tasking Order (for the purposes of which Information is disclosed); or
 - (C) If the Authority decides not to proceed with the issue of a Tasking Order (for the purposes of which Information is disclosed),

in accordance with any reasonable directions given and/or a reasonable request made by the other party promptly:

- (1) Return to the other party the Information and all copies thereof; or
- (2) Take such other measures in respect of the Information and all copies thereof as may be required elsewhere in the Tasking Order.

3 The provisions of DEFCON 531 and of this Clause shall survive the expiry or termination of the Agreement or any Tasking Order in accordance with 2(A) or 2(B) or the decision not to proceed in accordance with 2(C).

Appendix 3 to Schedule 3 (Price Summary)

Supplier price su for the requireme	mmary: To be con ent captured on the	npleted by the su e above Draft Tas	ıpplier in support o sking Order Form.	f a quotation provid	ded in respon	se to an ITT
1. To:Dave Gillespie		2. From: J	2. From: John Ward			
Date of submissi	on: 21/09/2015					
In response to your request for a quotation reference FTS/STS / FBC5543			Dated 04/09/2015			
Please refer to the	he offer letter for a	detailed breakd	onse is attached. [lown of the task pr es identified on this	ricing.		
(* Check box as	appropriate)					
Signed: J Ward Date: 21/09/2015		Name: (Block Capitals) John R Ward				
2. Task ti	tle): Combined Pr	roject				
	Reference Numb	er: NBCC/0010	2			
4. Start D	ate:	05/10/2015	Cor	npletion Date:	11/03/2016	
5a. Quotation Broad Capability Area No.	Grade	Hourly rate quoted at ITT		Reduction on original ITT rate	No of Hours	Total
5b. Travel			Unit cost	Number o		Total
	Rail			Journeys / M	iles	
	Motor Mileage (m	nax price per	£0.25 (inc VAT)			
	mile)	Air Sea				
5c. Subsistence	Estimated expen	diture on:	Unit cost	Number of Night/Days		Total
	A	ccommodation				
		Meals				
	Misc (pleas	se state below)	The above T&S	costs relate to the	period	to

5d,Other	Sub-contractor Price	
Costs	Sub-Contractor Details	
	Materials	
	Other (Please provide details below) Description	Cost
	·	
	Total Price	£167,791.91 (excl. VAT)

• Appendix 4 to Schedule 3 (Contract Pricing Statement)

Not Applicable

Appendix 5 to Schedule 3 (Montreal Protocol Substances)

CFCs Production of controlled CFCs has stopped.

CFC-11(trichlorofluoromethane)	CFC-211
CFC-12(dichlorodifluoromethane)	CFC-212
CFC-13	CFC-213
CFC-111	CFC-214
CFC-112	CFC-215
CFC-113 (trichlorotrifluoroethane)	CFC-216
CFC-114 (dichlorotetrafluoroethane)	CFC-217
CFC-115 (chloropentafluoroethane)	

The above substances are also used in blends: e.g. CFC-500 (CFC-12/HFC-152a) CFC-502 (CFC-115/HCFC-22).

Halons -	Production of controlled Halons has stopped.
Halon-1211	(bromochlorodifluromethane - BFC)
Halon-1301	(bromotrifluoromethane - BTM)
Halon-2402	•

HBFCs -	Production has	stopped.			
CHFBr ₂ C ₂ H ₂ F	Br ₂ Br ₂	C ₃ HF ₄ E	Br₃	C ₃ H ₃ F	₂ Br ₃
CHF ₂ BrC ₂ H ₂ F	₃ Br	C 3HF5 E	Br_2	C ₃ H ₃ F	₃ Br ₂
CH ₂ FBrC ₂ H ₃ F	Br ₂	C ₃ HF ₆ E	Br	C ₃ H ₃ F	F₄ Br
	$C_2 H_3 F_2 Br$		C ₃ H ₂ F	Br₅	C ₃ H ₄ FBr ₃
C ₂ HFBr ₄	C ₂ H ₄ FBr		C ₃ H ₂ F	₂ Br ₄	$C_3 H_4 F_2 Br_2$
C ₂ HF ₂ Br ₃			C ₃ H ₂ F	Br ₃ Br ₃	C₃ H ₄F₃ Br
C ₂ HF ₃ Br ₂	C ₃ HFBr ₆		C ₃ H ₂ F	Br ₂	C ₃ H ₅ FBr ₂
C ₂ HF ₄ Br	C ₃ HF ₂ Br ₅		C ₃ H ₂ F	5 Br	$C_3 H_5 F_2 Br$
C ₂ H ₂ FBr ₃	C ₃ HF ₃ Br ₄		C ₃ H ₃ F	FBr₄	C ₃ H ₆ FBr

HCFCs - Production to be run down and phased out by 2015. Certain use controls apply.

HCFC-21 HCFC-22 HCFC-31 HCFC-121 HCFC-122 HCFC-123 HCFC-124 HCFC-131 HCFC-132 HCFC-133	HCFC-141 HCFC-141b HCFC-142 HCFC-151 HCFC-221 HCFC-222 HCFC-223 HCFC-224 HCFC-225	HCFC-225ca HCFC-225cb HCFC-226 HCFC-231 HCFC-232 HCFC-233 HCFC-234 HCFC-241 HCFC-241	HCFC-243 HCFC-244 HCFC-251 HCFC-252 HCFC-261 HCFC-262 HCFC-271
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CARBON TETRACHLORIDE (CCI 4) - Production has stopped. 1,1,1-TRICHLOROETHANE (C₂ H₃ CI ₃) - Production has stopped. METHYL BROMIDE (CH₃Br) - Production limits apply.

Appendix 6 to Schedule 3 (DEFFORM 539A (Edn 08/13) Tenderer's Commercially Sensitive Information)

ITT Ref No: NBCC/00102

Description of Tenderer's Commercially Sensitive Information:

Selling rates per discipline

Cross Reference(s) to location of sensitive information in Tender:

Offer document Pricing Section

Explanation of Sensitivity:

There are no objections to the overall bid price being released but request that the individual hourly rates remain in comfidence between the Authority and Amec Foster Wheeler Nuclear UK Ltd

Details of potential harm resulting from disclosure:

Disclosure of this information may give competitors an unfair advantage in future bidding for MoD contracts.

Period of Confidence (if applicable): Duration of FATS/STS Framework

Contact Details for Transparency / Freedom of Information matters:

Name: Mr Alex Carne-Ross
Position: Commercial Manager

Address: AMEC, 305 Bridgewater Place, Birchwood Park, Risley, WA3 6XG

Telephone Number: 01925 462561

Email Address: alex.carbe-ross@amecfw.com

STATEMENT OF REQUIREMENT - Item No 1

Unique Tasking Order Number: Issue Number & Date: Unique Reference Number: NBCC/00102 V1 08/10/2015 N/A

Task Title: Maintain Shiplift Modelling Capability Against Current and Future Safety Case Requirements

Brief Description of Task:

The Finite Element (FE) models associated with the Shiplift Facility Safety Case 2005 and the Astute Class Facility Safety Case should be upgraded such that they are capable of running on modern sortware and hardware. Included within this will be the necessary revalidation work.

(or see attached detailed Statement of Requirement)

Background/Justification:

Background: The hardware and software used to run the Finite Element (FE) models associated with the Shiplift Facility Safety Case 2005 and the Astute Class Facility Safety Case is now 14 years old and obsolete. Though the data is regularly backed up, there is a real possibility that if a hardware failure were to occur the ability to run these models could be lost — one such failure has already occurred and proved almost unrecoverable — as the manufacturer no longer supports this system and spare parts could prove very difficult to procure.

Activities to be Undertaken:

1. Upgrade and validate a baseline of models such that they are cabable of running on modern software and hardware

Deliverables:

Successful Migration of the necessary FE models to enable them to run on modern hardware and software, including revalidation – enabling their maintenance and further exploitation in the future.

(insert here or see below Key Deliverables template)

Key Project Indicators (KPIs):

N/A

Government Furnished Assets (GFA) (List <u>all</u> GFA applicable to the task in accordance with DEFCON 611 (Edn 07/10)& 694 (Edn 02/12)):

N/A

(insert here or see below Key Deliverables template)

Additional Quality Requirements & Standards: Timescale:

Commencement Date: 8 Oc 2015

See AOF Quality Assurance Website:

http://www.aof.dii.r.mil.uk/aofcontent/tactical/toolkit/content/top

ics/qual.htm

Delivery Date: 15 Jan 2016

Project Manager: D Gillespie

Signature: David Gillespie Date: 08/10/2015

STATEMENT OF REQUIREMENT - Item No 2

Unique Tasking Order Number: Issue Number & Date: Unique Reference Number: NBCC/00102 V1 08/10/2015 N/A

Task Title: Review Shiplift Cradle Capper condition Categories With a View to Increase Capper Life

Brief Description of Task:

Review shiplift cradle capper condition categories with the view to increase capper life

Background/Justification:

The purpose of this work is to justify MOD capper condition categories. To date and in the absence of survey evidence to prove otherwise BM TRADA allows softening to a depth of 25mm.

BM TRADA can 'reverse engineer' the cappers to investigate if softening of as much as 100mm at end grains of the cappers can be tolerated i.e. can the cappers still work as designed with a reduced bearing surface and what is the maximum allowable reduction in bearing area?

This exercise may have the potential to justify the unsubstantiated softening of 100mm currently accepted used by MOD. If not, then the exercise might provide guidance on acceptable softening in excess of 25mm. This may then allow the MOD to introduce an extra condition category that will contribute to longer service life.

The acceptance of additional condition categories allowing deeper softening at the end grain will be conditional upon the cappers being free from internal pockets of decay which will be investigated using decay detection drilling techniques, previously used at HMNB Faslane in 2009 and 2010.

Activities to be Undertaken:

- Undertake a study to determine the maximum acceptable softening and loss of section at the end grain for cappers.
- Provision of a plan of the work including dates.
- Report providing guidance on acceptable softening in excess of 25mm currently used

Deliverables:

Report to be delivered providing details on the maximum permissible softening and loss of section at the end grain. (insert here or see below Key Deliverables template)

Key Project Indicators (KPIs):

N/A

Government Furnished Assets (GFA) (List all GFA applicable to the task in accordance with DEFCON 611 (Edn 07/10)& 694 (Edn 02/12)):
N/A

(insert here or see below Key Deliverables template)

Additional Quality Requirements & Standards:

Timescale:

Commencement Date: 8 Oct 2015

See AOF Quality Assurance Website: http://www.aof.dii.r.mil,uk/aofcontent/tactical/toolkit/content/topics/qual.htm

Delivery Date: 27 Nov 2015

Project Manager: D Gillespie

David Gillespie Signature:

Date: 08/10/2015

STATEMENT OF REQUIREMENT - Item No 3

Unique Tasking Order Number: Issue Number & Date: Unique Reference Number: NBCC/00102 V1 08/10/2015 V/A

Task Title: Review SD Angeline Design Specification and the Palfinger 1800A Stability Book and Amend the TR Appendices

Brief Description of Task:

Provide engineering assistance to review and update SD Angeline TR appendices to account for changes in design specification and include stability calculations.

Background/Justification:

Technical Report (TR) for the SD Angeline (Flexible Lifting Solution (FLS)) which together with the existing cranes will comprise the craneage at HMNB Clyde. The purpose of the SD Angeline is to perform lifts to and from SSN's that the Valiant Jetty mounted SLDs cannot perform, and also support other NPWs berthed within HMNB Clyde. In order to meet the Safety Case requirement for the SD Angeline the Technical Authority has been tasked to provide a Technical Report and supporting appendices. To allow the production of the TR the original appendices produced by AMEC will require to be assessed against the SD Angeline Design Specification and the Stability book for the Palfinger 1800A and the appendices updated to account for any change.

Activities to be Undertaken:

- Update each appendix where required with the design specification of the actual vessel in terms of description, general arrangement, weight etc.
- Review stability requirements in compliance with IMO/MCA and also when carrying out specific lifts. Carry
 out revised calculations where required.
- Carry out calculations to determine the motion of the vessel for different wind/sea conditions from different directions.
- Carry out calculations to determine the vessels motions due to wind effects.
- Combine the wind and wave motions to determine lifting conditions for critical lifts.
- Calculate revised Mooring Loads.
- Calculate the Impact energy of the vessel.
- Calculate the effects of current Derrick Boom failure.
- Calculate the number of refuelling cycles required.
- Determine the effect of the revised vessel motions on the crane.
- Determine geometry of lifting arrangements and lift paths and investigate any limitations.

Deliverables:

Soft and hard copies of SD Angeline TR Appendices

(insert here or see below Key Deliverables template)

Key Project Indicators (KPIs):

N/A

Government Furnished Assets (GFA) (List <u>all</u> GFA applicable to the task in accordance with DEFCON 611 (Edn 07/10)& 694 (Edn 02/12)):

N/A

(insert here or see below Key Deliverables template)

Additional Quality Requirements & Standards:

Timescale:

Commencement Date: 8 Oct 2015

See AOF Quality Assurance Website: http://www.aof.dii.r.mil.uk/aofcontent/tactical/toolkit/content/top

ics/qual.htm

Delivery Date: 18 Dec 2015

Project Manager: I Halliday

Ian Halliday Signature:

Date: 08/10/2015

STATEMENT OF REQUIREMENT - Item Nos 4-6

Unique Tasking Order Number:	Issue Number & Date:	Unique Reference Number:			
NBCC/00102	V1 08/10/2015	N/A			
Task Title: Contract to review/update TR 3410 & 3411 and associate fault trees to address installation of new sea water cooling system within the Shiplift.					
Brief Description of Task:					
Background/Justification:					
The existing TR's (3410 & 3411) and asso Shiplift. The Sea Water Cooling pumps an	ciated FTA are based on the orig d control system were replaced u	ginal sea water cooling system within the under DCR 1633.			
TR3410 Addendum 1 and TR3410 Apper	ndix 1, which currently make up substantiation calculations for th gamating these documents w	the three documents, TR3410 along with TR3410 into one overarching document. TR3410 into one overarching document are cooling water system and are currently ill provide the system description and			
TR3411: Cooling Water Systems Fault Tree Assessment provides fault and event tree assessments of the cooling water supplies to the Shiplift. Since the sea water cooling pumps have been replaced this TR requires updated to reflect the changes documented in DCR 1633. This provides the opportunity to re-run the FTA to investigate the effect on system reliability based on the new pump system and the feasibility of only running one pump in normal circumstances. This is an issue which has been identified in the past but has never been addressed. This could result in major cost saving benefits including energy costs, life of equipment, reduced spares etc.					
Activities to be Undertaken:					
 Update relevant Shiplift sea water cooling system fault trees, TR 3410 & TR 3411 to address installation of new sea water cooling system 					
Deliverables:					
Soft & hard copies of TR3410 & TR3411.					
(insert here <u>or</u> see below Key Deliverables template)					
Key Project Indicators (KPIs):					
N/A					
Government Furnished Assets (GFA) (List 07/10)& 694 (Edn 02/12)): N/A	t <u>all</u> GFA applicable to the task in	n accordance with DEFCON 611 (Edn			
(insert here <u>or</u> see below Key Deliverables	s template)				

Additional Quality Requirements & Standards:

Timescale:

Commencement Date: 8 Oct 2015

See AOF Quality Assurance Website: http://www.aof.dii.r.mil.uk/aofcontent/tactical/toolkit/content/top

ics/qual.htm

Delivery Date: Task 4 – 18 Dec 2015

Tasks 5 & 6 - 18 Mar 2016

Project Manager: R Oliver

Roddy Oliver Signature:

Date: 08/10/2015