

Programme: 801 Glen Sannox
 100m LNG Dual-fuel Ro-Ro Passenger Ferry

Review Period: June 2023

<u>Name</u>	<u>Job Title</u>	
David Tydeman	CEO	
[REDACTED]	Ship Delivery Director	
	CFO	



Agenda



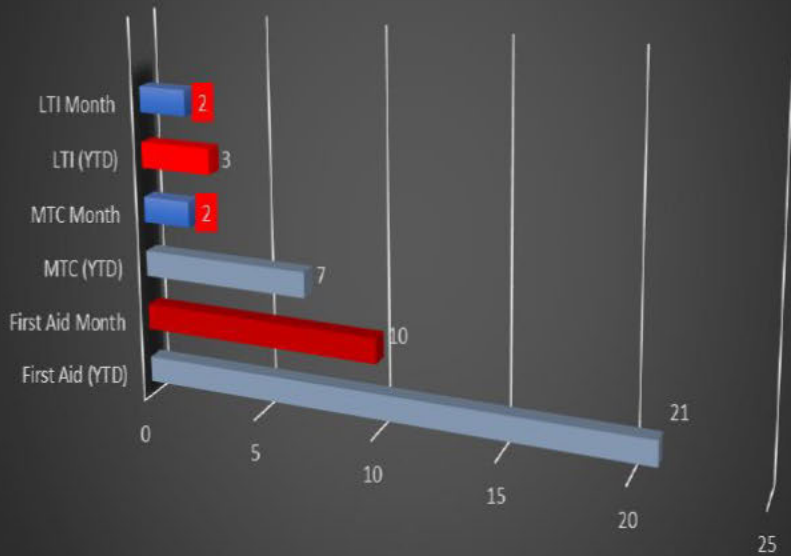
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HSE Dashboard June 2023

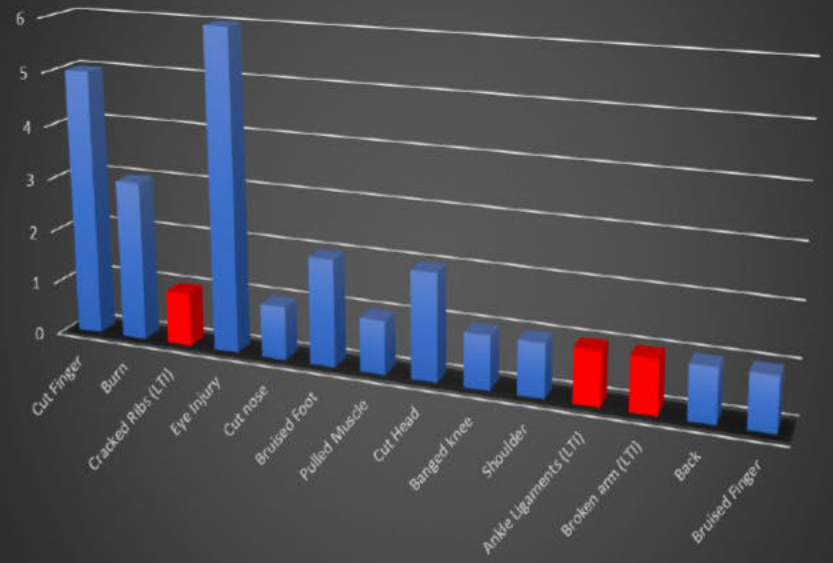
* Per 1,000,000 working hours
** Estimated no. of hours worked

Incident Statistics	Target	Actual		Fatal	0	Fire	0	Proactive Statistics	Target		Actual	
	2023	Month	YTD						Month	2023	Month	YTD
Number of Hours Worked**	858029	78137	234411	RIDDOR	2	Damage	0	Number of YSYD Cards	>50	>600	52	154
Number of Lost Time Incidents (> 3 Days)	< 9	2	3	LTI (> 3days)	2	Environmental	1	Toolbox Talks Issued	2	24	1	4
Lost Time Incident Freq Rate*	< 10.14	25.60	12.80	Medical Treatment (MTC)	2	Serious Near Miss	0	Housekeeping Inspections	4	48	4	12
Number of Recordable Injury Incidents	< 30	51.19	46.93	First Aid	10	YSYD	52	Emergency Drills Completed	>4	>48	1	4
Total Recordable Injury Incident Rate*	< 35.0	179.17	132.25	Total Injuries	12	TOTAL Incidents	4	Vessel Compliance Checks	30	420	30	90

Reported Incidents YTD 2023 / 2024



Injury Type YTD 2023/2024



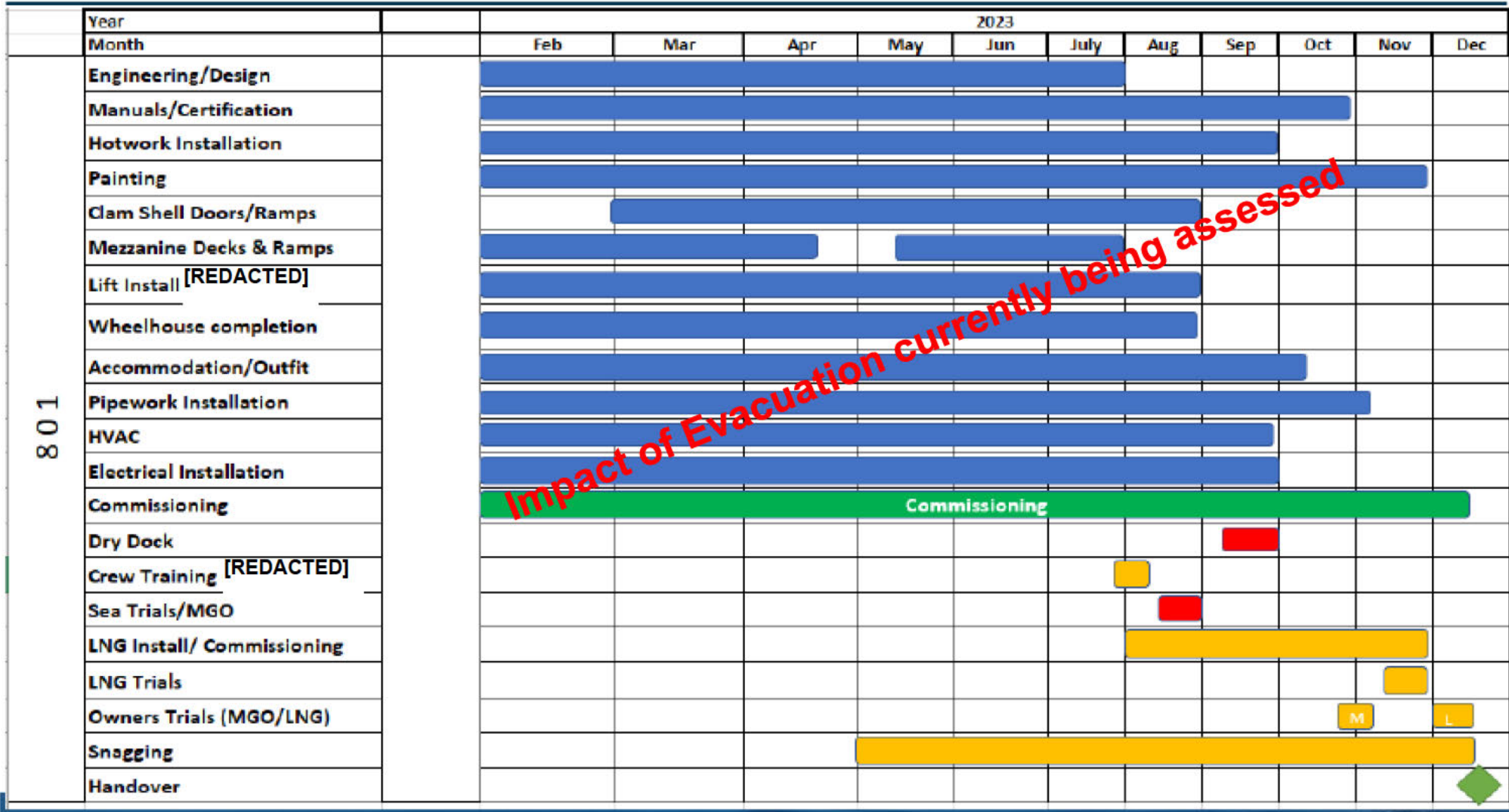
HSE Summary June 2023

Progress Update:

June Incidents

- We experienced 2 Medical Treatment Cases and 10 First Aids in the month of June
- 2 MTC incidents were RIDDOR reportable with IP's experiencing broken arm and ankle ligament damage respectively.
- **Looking to re-implement HAVs controls – following initial meeting costs have been received and now in discussions internally to move forward.**
- **[REDACTED] Air Quality filtration system in the main fabrication sheds within the yard – Main / Module shed survey to take place 5th July.**
- **Following breathe easy campaign meeting looking to initiate a breathe easy forum internally to help drive continual improvement throughout the shipyard. This will be added to the agenda to be discussed at the FMPG Safety Committee.**
- **Yard and vessel heat map to be established which will effectively identify clear responsibilities throughout the shipyard.**
- **New You See You Do Observation card participation drive required throughout the shipyard, again the new heat map will help drive this improvement moving forward.**
- Weekly safety walks are proving a valuable and efficient tool, however looking to drive effective closure of findings with various Managers and Supervisors throughout the yard, **the new responsibility heat map will also help drive this.**
- New planning meeting takes place every day at 15:00pm has been initiated for 801 with the main objective to understand what the main critical hazardous work scopes are to take place over the next 24 hours, this meeting has been positively received, **looking to initiate this meeting on 802 moving forward.**

801 Level 0 Programme

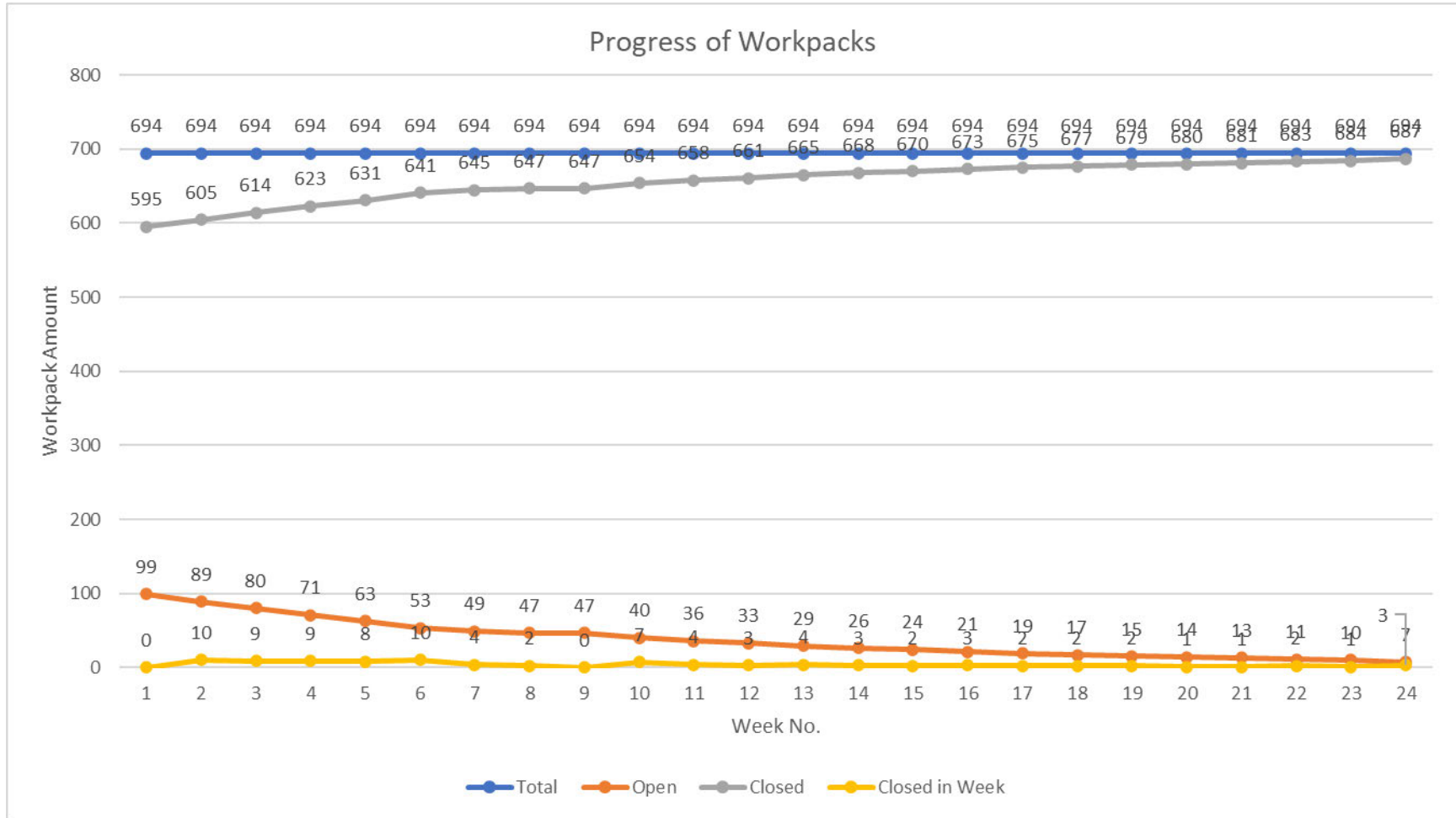


801 RAG Status

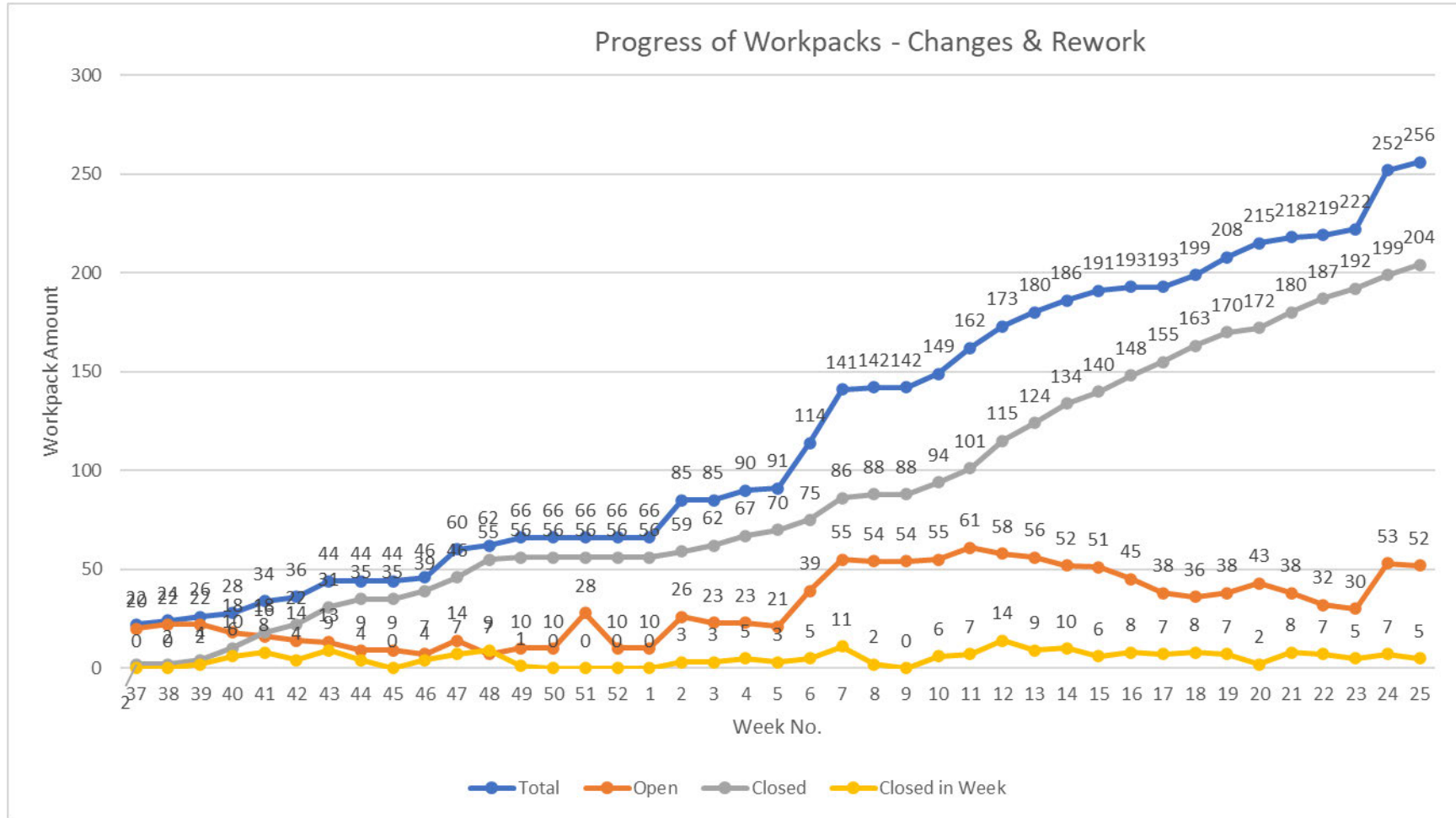


Discipline	Overall Status					Concerns	Actions	Comments
	Feb-23	Mar-23	Apr-23	May-23	Jun-23			
Overall Status	A	G	G	G	R	Passenger route evacuation	Solution being worked up by engineering for MCA approval	
Safety	A	G	G	G	G			
Engineering- Design	R	G	G	G	G			
Procurement	G	G	G	G	G			
Hot-Work	A	G	G	G	G			
Piping - FMPG	A	G	G	G	G			
Piping [REDACTED]	A	G	G	G	G			
Piping	A	G	G	G	G			
Mechanical	A	G	G	G	G			
Electrical [REDACTED]	R	G	G	G	G			
HVAC [REDACTED]	A	G	G	G	G			
Commissioning	A	G	G	G	G			
LNG	R	G	G	G	G			
Lift Install	A	G	G	G	G			
RO-RO Equipment	A	G	G	G	G			

801 Hotwork Work Packs



801 Hotwork Changes & Rework

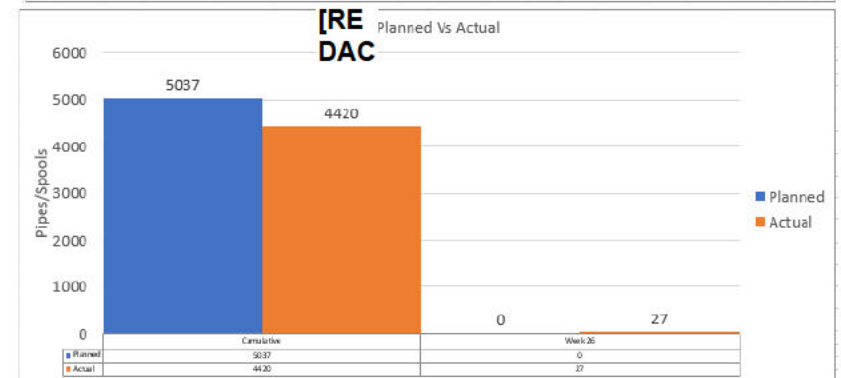
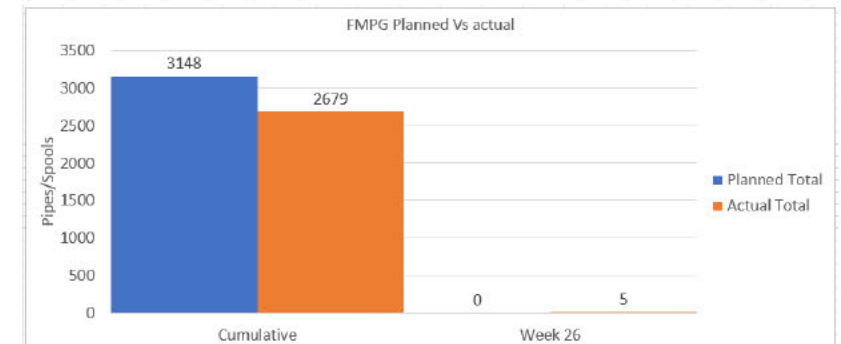
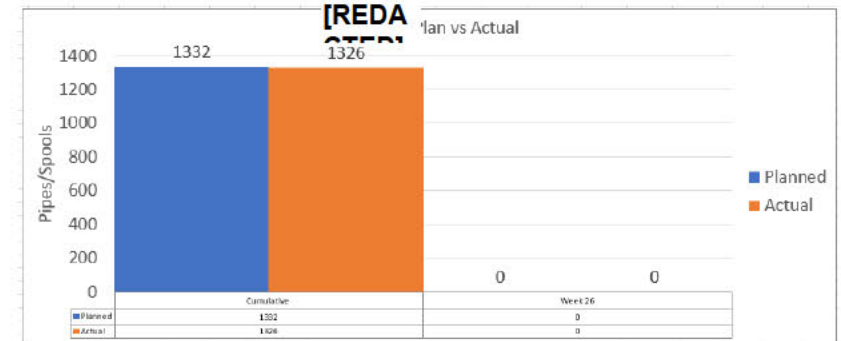


801 Pipework Installation

- [REDACTED] Total pipes/spools to install: 1332 (increased by 5 due to [REDACTED] modifications)

- FMPG total pipes/spools to install: 3148

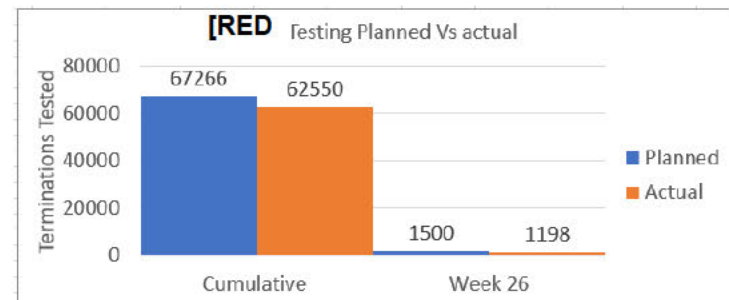
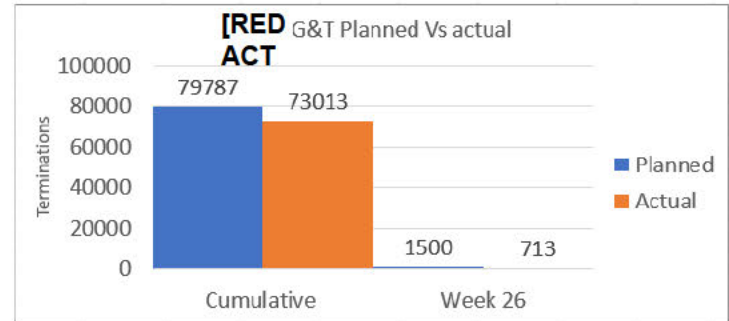
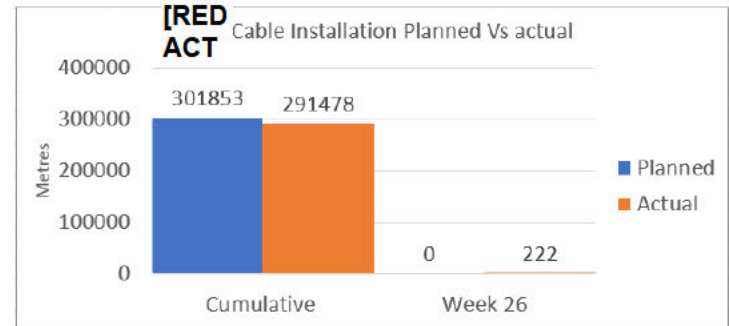
- [REDACTED] Total pipes/spools to install: 5037 (excluding modifications)



- **Total meterage to install: 301,853**
Week 26

- **Total to gland and terminate: 85670 (nr)**
Week 26

- **Total meterage to test: 85268 (nr)**
Week 26



[REDACTED] - HVAC Install

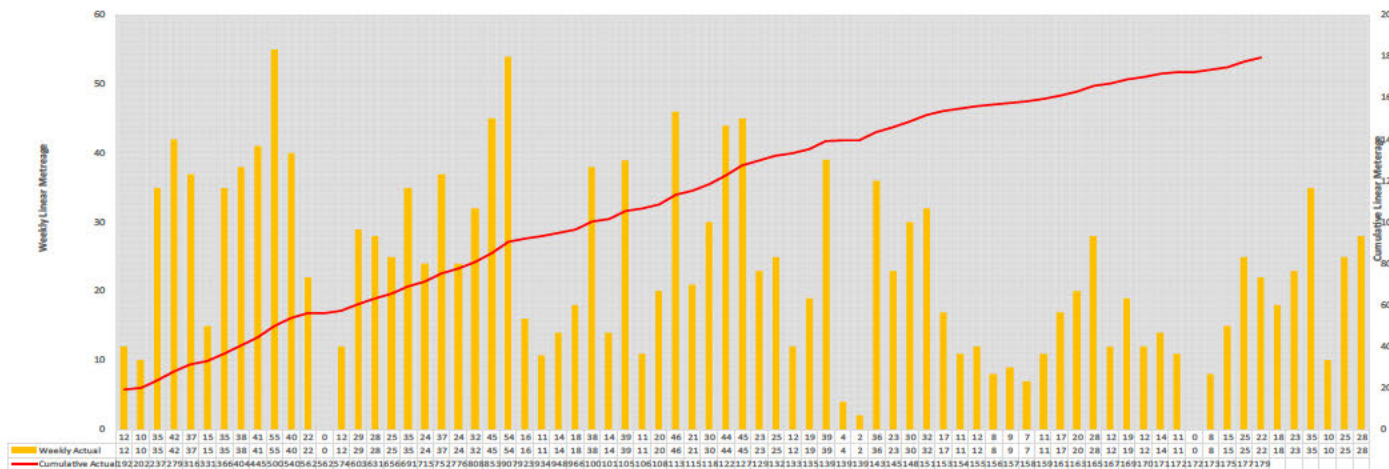


Week No. :	2523	
Total Estimate of Linear Metreage :	2380	
Estimate of Installed Metreage to Date & %age :	2217	93.1%
Total Metreage yet to be installed & %age :	163	6.9%
Current Date & Week No. :	26/06/2023	week 26
Completion of Installation :		
No of Weeks to complete ⁽¹⁾ :		
Required Duct Metreage Instal Rate per week to complete by Stipulated Date :		

Zone	Total Metreage	Installed Metreage	%age Complete
1	32	32	100.0%
2	35	26	74.3%
3	113	98	86.7%
4	94	90	95.7%
5	14	14	100.0%
6	378	288	76.2%
7	1	1	100.0%
8	304	286	94.1%
9	1096	1069	97.5%
10	198	198	100.0%
11	115	115	100.0%
Totals	2380	2217	93.1%

(1) Allowing 1 week for Easter & other stats

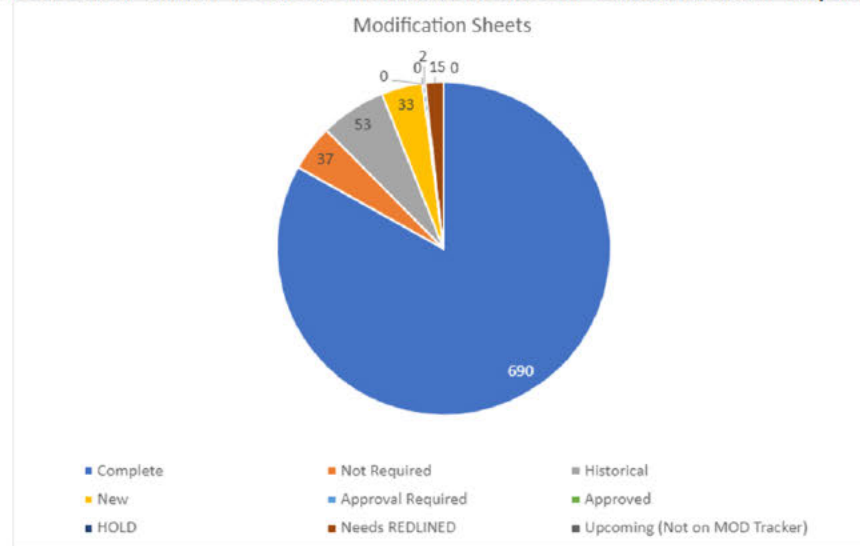
HVAC Installation Progress 'S' Curve



Engineering Status

- [REDA] Submissions – Final approval of LNG System Pending, submitted by [REDACTED] . All Engineering drawings for [REDA] updated and submitted, local approval is ongoing.
- MCA Submissions – 49 submissions awaiting feedback. MCA have been focused on Escape Routes. 27 pending MCA submissions. Engineering are currently developing solutions to the Escape Routes issue.
- Engineering have no outstanding OORs or TQs and continue to support production with Patrol remarks.
- Production of the Operations Manual is ongoing, format has been agreed with CMAL and CalMac.
- Production of final As Built Drawings is ongoing and due for completion end of July.
- All Engineering Modification sheets are complete, have been reviewed with Production and have been submitted for implementation at ship. See status below.

	Status Column / SMT Column	Total
Status Column	Complete	690
	Not Required	37
	Historical	53
	New	33
Approval Required Column	Approval Required	0
	Approved	0
	HOLD	2
	Needs REDLINED	15
	Upcoming (Not on MOD Tracker)	0
	Total Modifications	813



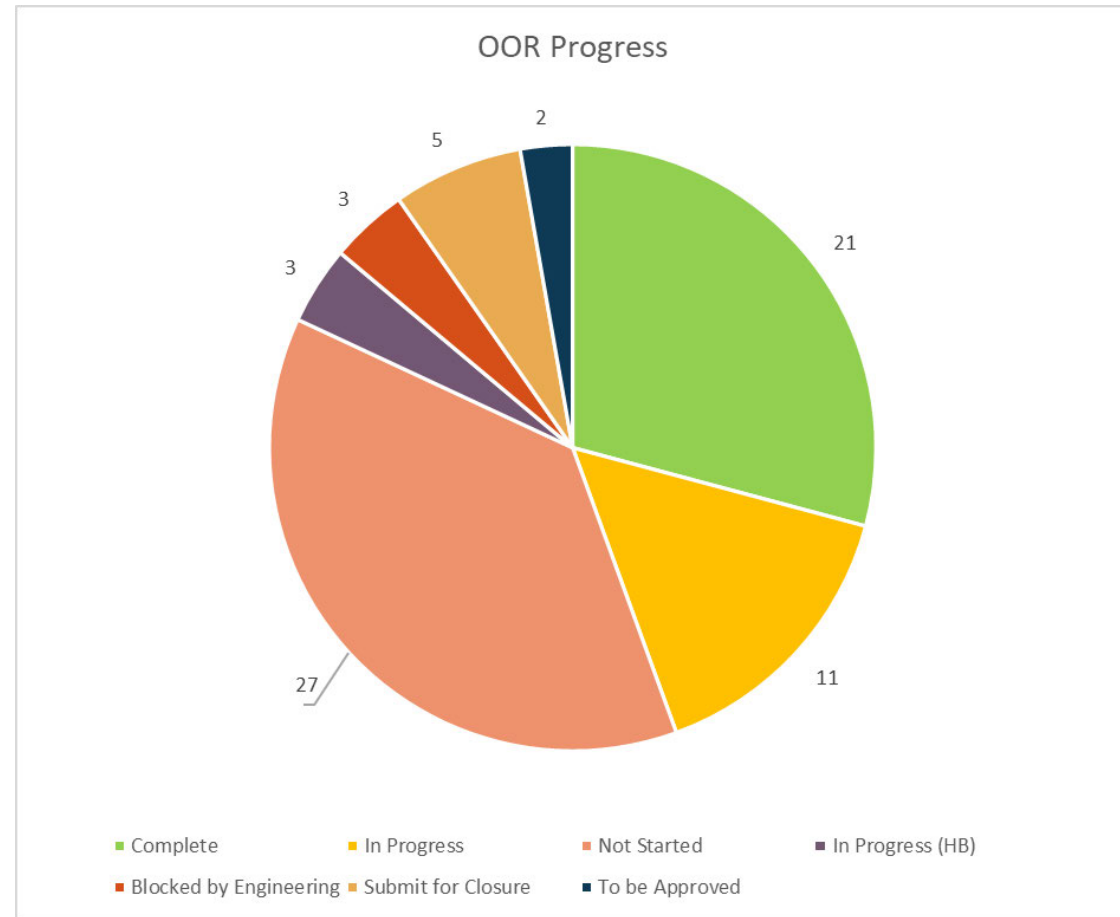
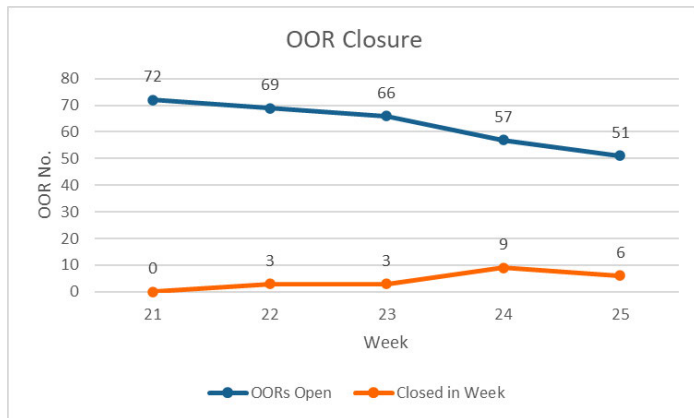
Risk

Current top 5 risks on risk register:

Risk Register 801											£6,475,000			£1,310,000		£6,675,000				
											Jun-23			Jul-23						
Risk ID	Risk Category	Risk Name	Risk Identified by	Risk Owner	Risk Description	Pre-mit. Imp.	Pre-mit. Likelihood	Pre-mit. Risk Score	Pre-mit. Rank	Resolution Planned	Action Owner	Post-Mit. Impact	Post-Mit. Likelihood	Post-Mit. Risk Score	Risk Premium	Post-Mit. Impact	Post-Mit. Likelihood	Post-Mit. Risk Score	Risk premium minimum	Risk Premium Max
C6-801	Compliance		[REDACTED]	[REDACTED]	An alternative Design arrangement submission (MSF 1261) relating to Secondary escape routes from passenger Observation lounge has been submitted for Equivalence to FFS Code requirements 1- updated supporting information submitted to MCA following initial review prior to Glasgow endorsement for HQ review. - confirmed by MCA glasgow office 31 now authorised by local office for HQ southampton final approval	50	3	150	7	1. Escape Analysis conducted confirming it arrangement escape meets the required escape times. 2. Robust design justification paper submitted 3. Site survey by MCA completed 4 New solution currently being worked up by Engineering for submission to MCA.	1. Andrew Milligan 2. D Henderson	25	2	50	[REDACTED]	25	5	125	[REDACTED]	[REDACTED]
P2-801	Production	Sub-Contractor	[REDACTED]	[REDACTED]	Sub- Contractor Performance 15% progress vs 65% is not aligned to commissioning	50	5	250	1	1. Recovery Plan now reviewed and monitored. Cable install now on track. G&T and testing behind plan.	1. John Gibson/Andy Crossan	25	4	100		25	4	100		
C2-801	Compliance	Project	[REDACTED]	[REDACTED]	There is a risk of delay (cost and schedule) due to OOR rectification, CMAL class or statutory findings as the build program matures. Residual risk from OORs relates now to impact on through life maintenance and its tolerability to CMLA/Calmac. Until this exercise is concluded by CMAL the Risk premium remains at this time	25	5	125	9	1. All remaining Open CAT 1 and OORs discussed and actioned at weekly meeting with CMAL. All WIP OORs to be managed through project/planning as WIP 2. Regular engagement with CMAL to derisk and identify potential issues 3. OORs now in production and being progressed	1. John Gibson 2. Colin Beckett 3. D Henderson	10	4	40		25	4	100		
SC5-801	Supply Chain	Material Management	[REDACTED]	[REDACTED]	Minimal fixed pricing/Minimal Pricing	25	4	100	12	1. Full stock check currently underway 2. BOM/SOW required 3. Engineering team assessing condition of material to BOM/SOW 4. Order materials ensuring lead times are aligned with the programme schedule. 5. More PINs and frameworks being implemented with reviews of existing SG and other frameworks that can be used	1. John 2. Eddie Purves 3. Eddie Purves 4. Stephen Goldie 5. Alistair Murray	25	4	100		25	4	100		
E2-801	Engineering	801 Engineering	[REDACTED]	[REDACTED]	Design Maturity, consolidation of design and management of change poses a risk to the delivery plan	10	5	50	19	1. Realign Engineering team structure 2. Strict control and ownership structure for change control processes 3 Restructure of Liaison, and QC teams to support operations 4. Discussions with [REDACTED] in now moved into CTG 5. [REDACTED] name with Coordination and	1. Andrew Milligan 2. John Gibson 3. Eddie Purves	50	5	250		25	4	100		

OOR Progress (Production)

- OOR 149 – Signed off
- OOR 347 – Signed off
- OOR 375 – Hotwork complete for spigots
- OOR 506 – Flywheel and shaft guards signed off
- OOR 548 – Signed off
- OOR 503/547 – Material under requisition
- 5 OORs close to completion while others in progress



Weight & Stability

Stability

- Intact Stability book was submitted on 9th Dec 2022. MCA's feedback received and intact section agreed on 31May2023.
- Damage Stability book was submitted on 9th Mar 2023. Although calcs are ongoing, MCA informed on 31May2023 that FMPG's methodology is correct. Final values subject to inclining experiment and to be updated.
- Lightship weight distributed and still water bending moments and shear forces calculated. The longitudinal strength calcs submitted to [REDA] provided limit curves on 23 Mar 2023 and related figures reflected to the longitudinal strength calcs and submitted to LR on 5 Apr 2023 [RE] comments received for the risk of buckling in the upper structure of the ship under compressive stresses on 23May2023. Under investigation with load conditions as advised by [R
- [REDACTED] fed with stability database on 17Mar 2023. [RED] loading computer will be integrated after MCA's preliminary book approval.
- Damage control plan and book templates are ready, to be released after stability book's approval by MCA.
- Regarding bespoke [REDACTED] and [REDACTED] agreed on the technical boundaries of the integration as of 05 Apr 2023. PO is raised and forwarded to the company and paid on 31May23. [REDA] confirmed completion of doors in the first week of August, and 2nd week of August to be FAT tested. Red Ensign certification correspondence is ongoing within [REDACTED]
- 802's stability information booklet was awarded on 24May2023.

Weight

- Calibrated weights will be used for both inclining experiment and [RE] ramps' load tests.
- Final inclining will be undertaken before sea trials.
- Usage of [REDA] NA screeding compounds as caused additional increase from planned estimates. Details being reviewed.

Escape Routes

- New MSF 1261 with relevant GA changes are to be implemented between 3-7 July 2023 and new proposal to be submitted by 7 July 2023.

Ship support activities

Manuals - No further update this period

- Site survey of as built equipment concluded (excluding ER/GB space which will be complete during commissioning activity)
- Operations Manual – This will be reviewed on an ongoing basis during commissioning of equipment. and training - FMPG will update the Operations Manual
- OEM Manuals ongoing and shared via shared FMPG-CMAL SharePoint CALMAC feedback positive. The site teams are working closely to identify the remaining elements –watching brief

Spares

- CalMac Gourock stores readying for next inventory from 5th June – Anchors, propeller Blades, FO purification Fenders. This activity will continue up to handover
- Consolidated master spares list now created and Procurement engaging vendors for identified delinquencies. Engineering team validating original spares list to current design.

Training – No further update this period

- 801 - [REDACTED] propulsion platform now completed [REDACTED]
- 802 - agreed in principle Q1/2024 19th until 23rd February 2024 (Propulsion at [REDACTED] on board); 26th February until 8th March 2024 (Engines at [REDACTED]; 11th until 15th March 2024 (Engine Control at [REDACTED]; 18th until 24 (LNG Pac at [REDACTED])
- PMS and Alarm and Monitoring system timings to be arranged with [REDACTED] in line with agreement below
- Classroom Training onsite then practical demonstration onboard and time afforded on board for following:
 - Nav and comms
 - Internal comms ~(i.e Entertainment CCTV etc)
 - Praxis Alarm and Monitoring
 - Power Management System
- For retrofit switchboards, [REDACTED] to provide O&M manuals for their modifications FMPG will then train the Ships staff onsite.
- EDICS online training

- Comments
- AOB