

Glen Sannox & 802 Monthly Report – [July 2021]

1.0 General

All comment is derived from the FMPG Revised Baseline Programme (RBP) dated 31st May 2021, issued to CMAL 28 June May 2021, the July 2021 Monthly Review Pack (MRP), issued 5th August 2021, the Contract Technical Specification, issued 16th October 2015 and Newbuild Consultancy Agreement, issued 2021.

1.01 Positioning of Vessels

Vessel 802, the partly assembled hull, remains positioned at Ferguson Marine's No 1 berth, Newark Works, Port Glasgow, since first steel cutting in June 2015.

Vessel 801, Glen Sannox remains alongside the outfitting berth at Ferguson Marine, Newark Quay, since her return from Dry Dock in August 2020.

1.02 Executive Summary

FMPG's only reference to the status of the revised baseline programme in this reporting period is that the status within the traffic light report (ref page 3), which has slipped from green to amber.

As it stands, project governance makes no attempt to report in line with industry-standard progress monitoring techniques. The most basic premise to report programme slippage reliably and routinely against the erosion of total float and subsequent impact upon critical path management is not addressed. Which indubitably will introduce unmanageable levels of risk, regardless of the management control exercised.

FMPG previously reported project progress within the MRP as earned value progress metrics. This information is not reported for the second consecutive month. It is not understood why at this relatively late stage of construction, comparing the budgeted cost of work performed against the budgeted cost of work scheduled would not remain sufficiently robust to be maintained as a reporting stream.

The risk register is deemed unreflective of the current issues faced by the project. This issue has been known for the last six months, which raises the question, if risks have not been fully identified and the action to mitigated not decided upon, how can the revised planning philosophy can be considered credible.

Despite the adjusted dates set out in the revised baseline programme (RBP), significant programme slippage is again quantifiable, raising immediate concerns about the level of unrealistic baseline expectations underpinning the RBP.

1.03 Yard Reporting

Meaningful reporting detail required to objectively brief key stakeholders on the current project status for each hull is not provided in the FMPG July monthly review pack (MRP).

The yard provide only a summary report via RAG status reporting where usually a red traffic light indicates problems, amber everything is okay, and green indicating things are going well.

The summary report presented on page 3 of the MPR presents a picture where only the Risk Management aspect of the project is currently flagged as an increasing risk.

The risk register was last shared in the June 2021 MRP, where the principal risks can be summarised as:

1. Delays against critical milestones (further vessel delivery delay)
2. Problems with quality that lead to unscheduled delay and
3. Significant lack of resources (manning and materials) which systemically challenges production output.

Reporting of risk register detail is also dropped from the July MRP against the footnote on page 3 that informs the register is again identified as needing process review and improvement. This position is not new; the traffic light register status has flagged this register as red (critical) for the past six months. The April 2021 MRP informs that planned corrections would reinstate the register to green by May 2021, this has not happened. Industry-standard practice warrants this essential document to be live and set up in such a manner to support constant review of inherent risk, determine their significance and finally identify the control policy needed to mitigate. A far more intuitive approach would be to instigate review in parallel, keeping the document live.

Sight of detailed discipline-based 'S' curves comparative reporting for actual - versus planned production metrics have been requested by CMAL for the past six months. This information remains outstanding this period despite its recognised status within the shipbuilding industry as the norm in early detection of programme slippage.

Customer Relationship is reported for the second month as amber within the traffic light report, ref page 3. Having been previously green since FMPG was established, FMPG changed this from Green to Amber 2 months ago, this was due to FMPG in regard to their response to a meeting 17 June 2021 on Owner's Observation Reports (OOR) and the process, which FMPG apologised for.

A meeting was held to finalise a rules of engagement document, CMAL are happy if the yard see the benefit of such a document. We advised FMPG that the shipbuilding contract provides clear insight into the rules of engagement.

1.04 Owners Observation Reports – Close Out

Work to close out Owner Observation Reports (OOR's) detailing building deficiencies covering statutory safety and build quality issues has largely stalled. A total of 12 ageing items have been mutually closed this period, two hundred and thirty issues remain open. Whilst not all OOR comments reflect the same level of potential threat to the production process. Those that do are not factored into the revised baseline programme, which again raises the issue of the fragility of the data underpinning the revised baseline programme.

1.05 Planning

Updated production actuals have not been shared as part of the July MRP documentation.

1.06 Out of Sequence Works

Delays caused by poor planning invariably serve as the precursor driving out of sequence works. E.g., Despite concerns raised by non-completion of the work scope defining the 'Structural Work Complete' milestone, claimed 7th May 2021. Incomplete works for the funnel installation, shell belting completion and remaining 17 vehicle deck recesses are still incomplete, continuing the need to draw down working hours that should now be spent on other planned works.

The Yard continues to pursue illogical sequenced works in the early fitment of machinery space floor plating support structure (zone 2). This dramatically complicates and reduces the efficiency to install the remaining system pipe spools, currently standing at circa 70% complete. Pressure testing and final system routing verification surveys will also be arduous to conclude. In cases where Class verification is needed, support structure will have to be removed, which will be hugely time-consuming. Installation of the main engine and auxiliary engine fuel oil booster and transfer pumps on their foundations is also delayed due to the floor plating subframe installation.

At this stage of the project, where total float is one and the same as the 15 weeks delay granted against vessel delivery, the Yard must strive to service the completion philosophy set out within the scheduling programme if current delays are to remain manageable.

[redacted]

1.07 Quality Control

The yards approach remains reactive as opposed to proactive in the early identification of building deficiencies. The resulting out of sequence corrective action invariably presents additional loading on available manpower as the work is essentially performed twice. Examples are to cut pipe penetrations beneath the freeboard deck and the poor standard of pre-inspection of the LNG vent mast.

1.08 Design Concerns

The length of time taken to conclude technical discussions is far too long, considering the time-constrained nature of each project. The over engineered equipment supports, and machinery space floor plate support frames are a case where the excessive material weight is known to exacerbate the vessel deadweight computation.

1.09 3D Model Accuracy

The number of clashes between unrelated systems remains a concern despite the remodelling work performed by [redacted]. The expectation is that this problem will escalate when [redacted] ramp up production. The outcome of which will be further unplanned production delays.

2.0 Changes to Site Supervision Team

Site Team core head count remains unchanged with x 4 inspectors on site. The team is expected to increase in the short term. However, this is based on production achievement.

3.0 Design Changes Approved

There have been no requests for design changes.

4.0 Agreed Changes to Delivery Date

The builder has provided formal submission of level one detail of their revised building schedule. Proposed changes to the project delivery dates can only be agreed after verified review of further scheduling detail currently under discussion.

5.0 Agreed Changes to Price

There are a small number of small changes requested by builder and buyer which the builder has still to finalise, most which were identified during the extensive 3D model review last year.

6.0 Changes Awaiting the Owner's Approval

None.

7.0 Surveys/Inspections

Official survey work has yet to build any momentum, the yard has omitted to call CMAL for routine inspections of the forward mast and hydrostatic testing of tank 5 (MGO).

801 Pre-Insulation survey of underside of decks 05 & 07

802 Side shell unit butts Port and starboard, Aluminium units Nos A3-5, Steel unit 94 officially called for inspection

8.0 Progress Against Programme

8.1.01 Progress 801 Glen Sannox

Our ability to review the revised baseline programme (RBP) progress for July is severely curtailed as documented updates have not been shared since its formal release to CMAL on 28th June 2021.

8.1.02 Installation of Pipe Spools in Zone 2 (Main & Aux Machinery Spaces)

Slippage of 31 calendar days is reported against the planned revised baseline completion date for installing system piping in the main and auxiliary engine rooms. This work is currently deemed to reside on the project's critical path as completed systems are the predecessor of system mechanical completion required to start the successor activity of commissioning. Based on the historical rate of spool installation of 60/week, this key event will likely not be met earliest until the end of October 2021 as the remaining deliverable is circa 1,000 spools (ref June MRP, page 25). It remains to be seen if the existing float supports on-time commencement of logical commissioning activities.

8.1.03 Pressure Testing of Pipe Spools in Zone 2 (Main & Aux Machinery Spaces)

Slippage of 19 calendar days is reported against the planned revised baseline completion date for installing system piping in the main and auxiliary engine rooms. The duration of 67 calendar days is planned as needed to complete the task. This duration has a foundation in the time taken to pressure test X 25 complete systems. The important context in this discussion is that pressure testing will now be performed against partially complete systems, significantly increasing the time necessary to complete this task.

8.1.04 HVAC Testing

Zone 2 - Slippage of 15 calendar days is reported against the planned revised baseline start date. Zone 3 - Slippage of 24 calendar days is reported against the planned revised baseline start date. Whilst FMPG retains the flexibility to plan the commencement of works as they see fit, the scheduling of the above testing is illogical as no testing can be performed or needs to be performed until each zone distribution is complete. The relationship between the completion of works and the start of testing is illogical.

8.1.05 Hot Work Completion in Zone 2

Completion of hot work was scheduled for 30th July 2021, work to complete the hull outfitting and installation of walkway sub-framing is far from complete. Slippage will be reported for August 2021.

8.1.06 Fabrication of the Forward Mast Structure

A slippage of 39 calendar days is reported against the revised baseline completion date. Whilst this activity is not deemed to reside on the critical path, the expectation is that the now out of sequence work to erect the mast will make demands on limited worker resources, preventing timely completion of other works.

8.1.07 Erection of Forward Mast

Slippage of 39 calendar days is also reported against the planned revised baseline start date to outfit, fair and weld this structure. This work is scheduled to take 35 calendar days to complete. The impact of this now out of sequence work will likely be the precursor of future delays unless manning numbers are increased.

8.1.09 None of the principal 3rd party contractors [redacted]

has increased their manning numbers over the reporting period for either vessel, despite the inference presented in the revised baseline that planned the release of sequential working interfaces.

8.1.10 Contractual Deadweight

Non-compliance with the contractual deadweight for Hull 801 remains an issue as the reported figure has now increased by a further 9.84 MT to 44.29MT. Despite yards assurances that sufficient guaranteed margin is available to annul the issue, without the benefit of the complete weight review, how the Yard will recover the 15% needed from the remaining weight estimation remains unclear. All necessary steps must be taken to eliminate the possibility of reduced cargo-carrying capacity and possible operational draft restrictions for either vessel.

8.1.11 Milestone Status 801 **Updated to reflect revised baseline**

Milestone' Completion of Car Deck Recesses' originally due 9th April 2021 and is now claimed as complete 7th May 2021, is now scheduled to be complete 24th May 2021 under the guidance set out in the re-baselined programme. The balance of work needed to complete the remaining

17 structural recesses remains to be started. The programme slippage currently stands at 68 calendar days.

Work to complete the claimed milestone of structural completion claimed 7th May 2021 remains ongoing. Where many other areas need to be worked and completed to achieve 'full' Steel/Aluminium Structural Completeness. Examples are, installation of all remaining internal bulkheads, aluminium bulkheads within the accommodation areas, installation of all stairwells, completion of welding of all Panama fairleads, completion of lift shafts, installation of all windows, installation of Forward Mast and the cutting / opening of bow doors and associated major structural works.

Aft Mast: As of week 21, 2021, milestone completion claimed 7th May 2012. However, final acceptance by CMAL inspection was not possible as the build quality of vent pipe supports and poor standard of internal structure coating was insufficient to satisfy normal industry build standards, or the requirements set out in the contractual specification.

Belting: Milestone completion claimed 7th May 2021; As of week 30, 2021, work remains incomplete on the starboard side of the vessel, work has been progressed this period to complete the port aft belting, this is not expected to complete until week 34, 2021.

8.2.01 Progress Hull 802

8.2.01 Milestone Status 802 **Updated to reflect revised baseline**

Commence Zone 2 Pipework Manufacturing, originally scheduled to start February 2021 is now rescheduled under the re-baselined programme to start 24th May 2021, this event already started back in week 26.

Complete Preparation Unit 48 – Originally scheduled for completion in December 2020 is now rescheduled within the re-baselined programme to be complete 25 May 2021, as of week 32 this activity is not complete. Programme slippage currently stands at 68 calendar days.

Commence Zonal Hot Work Programme Zone 2, scheduled to start 21st July 2021, as of week 32 this activity is not started. Programme slippage currently stands at 10 calendar days.

Commence Zone 2 Pipe Work Installation, scheduled to start 12 July 2021, as of week 32 this activity is not started. Programme slippage currently stands at 19 calendar days.

Commence Tank Testing, originally scheduled to start January 2021, now re-baselined to start 26 July 2021, as of week 32 this activity is not started. Programme slippage currently stands at 5 calendar days,

Clearly the baseline expectations underpinning the RBP are unrealistic.

9.0 Next Stage Payment Due

CMAL are not party to Stage payments between the builder and the buyer.

10.0 Forthcoming Period Events

(Note of events, visits, holidays or other yard commitments)

11.0 Tests & Trials Due

There has been no major planned test during this reporting period.

12.0 Risk Register Update

Reporting of risk register detail is dropped from the July MRP against the footnote on page 3 that informs the register is again identified as needing process review and improvement (see 1.02 & 1.03).

There are several risks identified by FMPG as high risk, with a risk score of 250. Most are relating to programme. The most concerning technical risk is that the vessel cannot meet contract deadweight (see 8.1.10). We have stressed to FMPG since the new team were in place, the importance of this, and there requires to be certainty and appropriate action.

13.0 Safety & Environmental

Suitable controls are in place by the Yard to address all significant safety hazards which are reported monthly through authoritative good practice. A total of X8 First Aid Cases, X0 Fatalities, X1 Medical Case and RIDDORS Ratio of 0 and X41 lost working days are reported this period.

Print Name: Jim Anderson

Signature:

Date: 20 August 2021.