

Assessment Task 1:**1. Case study: Sail-Away Sports Limited (see attachment)****2 Student learning outcome**

List below, in alpha format, what **key** knowledge and skills students would be expected to attain by successfully completing this subject/unit (link to assessment tasks (refer to 2.4 below)):

- | | |
|-----|---|
| (a) | Demonstrate knowledge of the links between management accounting, customers, suppliers and sources of external information and appreciate what is relevant to decision-making in a Management Accounting context. |
| (b) | Effectively use costing techniques and describe the strengths and limitations of such techniques |
| (c) | Analyse accounting information and present reports in various formats |
| (d) | Describe and utilise the basic concepts of planning and control systems |
| (e) | Show an awareness of the ethical and regulatory dimensions of accounting |

2. Student assessment:

Provide, in table format as shown below, a schedule of formal assessment tasks and major examinations for the subject/unit.

Assessment Type	When assessed	Weighting	Learning Outcomes Assessed
Group project	Week 11 Due via Moodle 10 AM Tuesday 5 February	20%	a, b, c, d, e

3. The Assignment is to be submitted (using either MS Word and/or MS Excel) via Turnitin on the KOI Moodle site by 10am Tuesday 5 February 2013. A hard copy (Paper copy) of the Case study is to be handed in either at the Lecture or at the beginning of your Tutorial class in Week 11.

Students should note, that the hard copy is to ASSIST in marking however the electronic submission MUST occur by 10am Tuesday 5 February otherwise there will be a 20% penalty for ANY late submission PLUS an additional 5% penalty for each day late after Monday. No assignment will be marked after one week late. Please do NOT bring Doctor's Certificates for the due date. As this is the work of an entire group, please ensure you have sufficient group members ready to work to deliver the work ON TIME.

ACC200 – Introduction to Management Accounting

Trimester 3 – 2012

Group Assignment

Due 10am Tuesday 5 January 2013 (Week 11)

Sail-away Sports Limited design and manufacture small sail craft (boats). They manufacture three different model boats as follows:

Model 3DSB - 3m Dinghy Sail Boat

Model 36THS - 3.6m 2-handed Sail Boat

Model 40CSB – 4.0m 2-handed Sports Boat

The following information is known about Sail-away Limited:

Sail-away's boats are made in three stages:

The *HULL* (the bottom part of the boat that goes in the water) and the *DECK* (a cover that is glued to the *HULL* to make it water-tight) are made from fibreglass. To make the Hull and Decks, the fibreglass is formed in a *MOULD* one mould for each component which can be re-used many times. This operation is performed in the *Moulding Department*. Once the hull and deck components are formed and set, they are then sent to the *Fitting Department* for "*FITTING*"

In the *FITTING* Department buoyancy devices (foam blocks to prevent the boats from sinking in case of capsize) are fitted and the Hull and Decks are glued together to form the final boat shape (called a 'HULL UNIT') along with final fibreglass forming. The Fitting Department pass these HULL UNITS along to the storage facility to be held for later use. As each unit is supervised by a separate team leader and there may be a separation of time between *MOULDING* and *FITTING*, separate Production Process Reports are used for each of the Departments and the finished 'HULL UNIT' are considered 'completed at this stage of production.

The sails for the boats are standardised designs however each model boat has a different-sized sail. The sails are made in a second production line as the skills required to make sails are quite different to those for moulding and fitting the boats. As the sails are standardised in size and materials, Sail-away Sports runs a separate production line for the making of the sails. The Sail cloth is quite 'high-tech' and must be cut carefully by experienced sail-makers and each section is carefully labelled to avoid unnecessary wastage and is batched according to sail-type then passed to the *Stitching and Gluing Department*. The *Stitching and Gluing Department* assembles the sail, using various glues and heat-fusion techniques and some stitching processes to complete each sail. Once finished, the completed sails must be handled carefully to ensure they are not damaged and are passed to the *Packaging Department* for careful packaging, labelling and storage ready for sale.

Once Sail-away Sports receives the orders from the Schools for their boats, finished Hulls and sails are taken from the Storage Facility and sent to the *Rigging Department* where final *RIGGING* (The aluminium masts, pulleys (blocks), cleats (components to hold adjustable ropes in place), rudders,

centreboards and other necessary components are fitted to the boats in batches according to the number required for each customer order.

With a storage facility that can hold many 'completed' HULL UNITS and many SAILS, Sail-away Sports can more evenly space production throughout the year to maintain the labour force over the 'quiet months' (typically during Winter) and have plenty of stock ready for the busy periods during Spring and Summer when the 'Sailing Season' is fully underway.

Finally, each order is sent to the *Packaging and Logistics Department* where it is given a final quality check, cleaned and packaged for shipping to the Customer with all components packaged together as complete boat sets in 'ready-to-sail' condition for use by the schools.

Sail-away Sports has a small sales team and a customer service and training team which are available to visit schools that order their sail boats. These teams are trained in both sailing and can also make small warranty repairs and train school staff on the maintenance and upkeep of the boats. This level of service is highly valued by schools and has led to increasing demand for their products as their reputation for a good quality product and great service has spread among schools so that advertising is rarely required apart from some sponsorship funding to regattas that are often held when inter-school competition occurs.

Recently, due to the great success and popularity of their product, the Australian Sports Commission, keen to expand on Australia's recent success in sailing at the recent Olympic Games, is looking for ways to satisfy increased community interest in the sport of sailing. Along with Yachting Australia (the Sport's governing body), they are considering offering support to local sailing clubs around Australia to buy small fleets of standardised but competitive sail-boats. Like most Government bodies however, before they agree to offer contracts to supply to any company, they want to be sure these potential suppliers are well-run and financially stable.

Sail-away Sports have been approached and offered an opportunity to participate as a 'Preferred Supplier'. To obtain this status however they must submit (in confidence) full costing reports to a 'Review Panel' who will assess the management and viability of the business before accreditation can be granted.

You are the Management Accountant at Sail-away Sports and for this reason you have been asked to generate full costing reports (including variations from STANDARD COSTS) based on the past year's production.

Direct Material:

Each boat uses a different quantity of materials which include fibreglass matting and resin products to make the hull, decks and the same materials also used in the fitting department where buoyancy blocks (waterproof foam blocks) are also fitted therefore a single Standard Price or Quantity Variance cannot easily be calculated.

(See attached worksheets for detailed information.)

What you are required to do:

Your task is to calculate the Standard Material and Labour Variances for all three models. You are then to prepare a BRIEF report which includes a summary of the results of Sail-away's production over the past year.

This should include a FULL analysis of the Actual Results compared to the Standard Costs.

How do you calculate the variances for Material if a product has different quantities of different material all at different prices?

All variances must be calculated for EACH LINE of Labour AND EACH LINE of Material. (Use the columns to the right of the numbers supplied in the MS Excel Worksheet for your calculations.)

Notice the Labour Rate is different for each activity in the boat-making process (Sail-makers will be paid more than Warehouse Store Persons as they have a much higher skill-level etc.) so the Rate Variations should be calculated for EACH separate Labour Rate/Activity shown. Similarly, the Efficiency Variances should be calculated for each line shown for Labour for each activity.

Likewise, Material Quantity and Cost Variances will have to be calculated for EACH LINE for EACH ACTIVITY for EACH PRODUCT. (Once you have worked out the headings and the formulae, this should be VERY STRAIGHT-FORWARD.)

What do you do with the Weighted Average Labour Rate?

Note: There is a weighted average Labour Rate for each product AND a weighted average PLANT-WIDE Labour Rate shown at the bottom of each Excel Worksheet. (This has been calculated by averaging all wage rates and standard times given the amount of output for 1. Each Product; and 2. for the entire plant.) **NOTE:** This can NOT be done for Material Variances as there are so many different components and usage quantities for each product so this can ONLY be calculated LINE by LINE for each INPUT (e.g. Fibreglass Matting or Resin etc.) separately for each product.

You can work out the Labour Rate and Efficiency variance for the Product AS A WHOLE using the Weighted Average Product

What you do NOT have to do...

You do NOT have to calculate any overhead variances as we have not fully discussed this in class and therefore would be too difficult at this stage to calculate for most students.

Is there anything else?

In addition, the report should include a SHORT (500 word) summary of the benefits and limitations of the Standard Costing System and how improvements may be made to the results of the Company using timely feedback to the various department managers and employees. Were there any great results or 'EXCEPTIONS' that you believe should be investigated further?

Copies of the actual MS Excel Worksheets are available under WEEK 9 for you to download. **Don't forget next week's Lecture will cover Overhead Variances in more detail and you can bring your questions in relation to the Assignment and we will try and assist you then!**

How can we keep track of those students who are not participating in group work?

Each student in a group, up to three in a group, (if you have more than three, two will have to work together ONLY with the Lecturer's approval) and each student should work on a product EACH. There are three products so there is one for each student. If you can all work together, I suggest you do so however as it will be MUCH FASTER and you should all learn together how to solve problems and apply the theory from the course.

Please advise ASAP if a group member is not cooperating in setting up meeting times. DO NOT CONTACT ME ASKING IF YOU CAN DO THE ASSIGNMENT ON YOUR OWN. EVERY STUDENT HAS HAD 11 WEEKS TO FIND A PARTNER(S) SO YOU SHOULD HAVE HAD THAT ORGANISED BY NOW.

Likewise, if a student is without a group and asks to join your group, PLEASE do everything you can to accept that member into your group and work together. Being flexible in this manner is a strong sign of maturity and is a skill that is highly prized by employers, practice that skill now!

Budgeted Units	500	Model 3DSB - 3m Sports Boat												
Units produced	600													
	Variable budget used - based on quantity produced													
	Labour						Materials							
	Standard quantities and costs				Actual Labour Costs and Hours		Standard quantities and costs						Actual Material Costs and Usage	
	Labour cost per unit	Labour hours per unit	Total hours	Total Standard Cost	Labour Hours this year	Annual labour cost (average)	Material Cost per unit	Unit measured	Quantity per unit produced **	Cost per unit produced **	Total standard material used	Total standard material cost	Quantity used this year	Material Cost this year
Hull-making														
Moulding	\$30.00	5.50	3300	\$99,000.00	3465	\$94,050.00								
Resins							\$25.00	litres	10	\$250.00	6000.00	\$150,000.00	6600	\$156,750.00
Glass Matting							\$12.00	metres	20	\$240.00	12000.00	\$144,000.00	12600	\$143,640.00
Fitting	\$30.00	2.50	1500	\$45,000.00	1575	\$42,750.00								
Resins							\$25.00	litres	4	\$100.00	2400.00	\$60,000.00	2760	\$65,550.00
Glass Matting							\$12.00	metres	1	\$12.00	600.00	\$7,200.00	708	\$8,071.20
Bouyancy Blocks							\$7.50	each	4	\$30.00	2400.00	\$18,000.00	2400	\$18,900.00
Sail-making														
Cutting	\$40.00	1.00	600	\$24,000.00	576	\$24,960.00								
Main-sail cloth - Mylar							\$25.00	metres	4	\$100.00	2400.00	\$60,000.00	2520	\$66,150.00
Headsail cloth - Kevlar Fibre							\$35.00	metres	3	\$105.00	1800.00	\$63,000.00	1926	\$70,780.50
Glueing and stitching	\$40.00	1.50	900	\$36,000.00	873	\$37,440.00								
Rigging														
Rigging	\$30.00	4.25	2550	\$76,500.00	2448	\$79,560.00								
Rigging Set							\$1,950.00	One set	1	\$1,950.00	600.00	\$1,170,000.00	600	\$97,500.00
Storage, Packaging & Shipping	\$25.00	2.25	1350	\$33,750.00	1417.5	\$36,112.50								
Weighted average hourly rate this MODEL	\$30.81												Total	Total
Total standard/actual costs:		17.00	10200	\$314,250.00	10355	\$314,872.50				\$2,787.00	28200	\$1,672,200.00	1682400.00	\$1,986,450.00

Weighted average PLANT-WIDE Direct Labour Hourly Rate
\$30.87

* Note that the 'Units' in this column is the units of INPUT to each unit of output (eg there are 4 Bouyancy Blocks used each Model 3DSB Boat)

** Note that the 'Units Produced' referred to in this column refers to finished units of product (eg the standard cost of Bouyancy Blocks is \$30 per UNIT PRODUCED or 4 x \$7.40 each)

Budgeted Units	550	Model 36THS - 3.6m Sports Boat												
Units produced	575													
	Variable budget used - based on quantity produced													
	Labour						Materials							
	Standard quantities and costs				Actual Labour Costs and Hours		Standard quantities and costs						Actual Material Costs and Usage	
	Labour cost per unit	Labour hours per unit	Total hours	Total Standard Cost	Labour Hours this year	Annual labour cost (average)	Material Cost per unit	Unit measured	Quantity per unit produced **	Cost per unit produced **	Total standard material used	Total standard material cost	Quantity used this year	Material Cost this year
Hull-making														
Moulding	\$30.00	5.75	3306.25	\$99,187.50	3537.6875	\$94,228.13								
Resins							\$25.00	litres	13	\$325.00	7475	\$186,875.00	6600	\$156,750.00
Glass Matting							\$12.00	metres	25	\$300.00	14375	\$172,500.00	12600	\$143,640.00
Fitting	\$30.00	2.65	1523.75	\$45,712.50	1630.4125	\$42,055.50								
Resins							\$25.00	litres	6	\$150.00	3450	\$86,250.00	3968	\$94,228.13
Glass Matting							\$12.00	metres	2	\$24.00	1150	\$13,800.00	1357	\$15,469.80
Bouyancy Blocks							\$7.50	each	6	\$45.00	3450	\$25,875.00	3450	\$27,168.75
Sail-making														
Cutting	\$40.00	1.10	632.5	\$25,300.00	607.2	\$26,312.00								
Main-sail cloth - Mylar							\$25.00	metres	6	\$150.00	3450	\$86,250.00	3623	\$95,090.63
Headsail cloth - Kevlar Fibre							\$35.00	metres	4.5	\$157.50	2588	\$90,562.50	2769	\$101,746.97
Glueing and stitching	\$40.00	1.65	948.75	\$37,950.00	920.2875	\$39,468.00								
Rigging														
Rigging	\$30.00	5.25	3018.75	\$90,562.50	2898	\$94,185.00								
Rigging Set							\$1,650.00	One set	1	\$1,650.00	575	\$948,750.00	600	\$79,062.50
Storage, Packaging & Shipping	\$25.00	2.75	1581.25	\$39,531.25	1660.3125	\$42,298.44								
Weighted average hourly rate this MODEL	\$30.72												Total	Total
Total standard/actual costs:		19.15	11011	\$338,243.75	11254	\$338,547.06				\$2,801.50	36513	\$1,610,862.50	1621874	\$1,949,106.25
Weighted average PLANT-WIDE Direct Labour Hourly Rate	\$30.87													
	* Note that the 'Units' in this column is the units of INPUT to each unit of output (eg there are 4 Bouyancy Blocks used each Model 3DSB Boat)													
	** Note that the 'Units Produced' referred to in this column refers to finished units of product (eg the standard cost of Bouyancy Blocks is \$30 per UNIT PRODUCED or 4 x \$7.40 each)													

Budgeted Units	190	Model 40CSB - 4m Sports Boat												
Units produced	235													
	Variable budget used - based on quantity produced													
	Labour						Materials							
	Standard quantities and costs				Actual Labour Costs		Standard quantities and costs						Actual Material Costs	
	Labour cost per unit	Labour hours per unit	Total hours	Total Standard Cost	Labour Hours this year	Annual labour cost (average)	Material Cost per unit	Unit measured	Quantity per unit produced **	Cost per unit produced **	Total standard material used	Total standard material cost	Quantity used this year	Material Cost this year
Hull-making														
Moulding	\$30.00	6.60	1551	\$46,530.00	1628.55	\$44,203.50								
Resins							\$25.00	litres	20	\$500.00	4700	\$117,500.00	6600	\$156,750.00
Glass Matting							\$12.00	metres	35	\$420.00	8225	\$98,700.00	12600	\$143,640.00
Fitting	\$30.00	3.75	881.25	\$26,437.50	925.3125	\$25,115.63								
Resins							\$25.00	litres	6.5	\$162.50	1528	\$38,187.50	1757	\$41,719.84
Glass Matting							\$12.00	metres	2.2	\$26.40	517	\$6,204.00	610	\$6,954.68
Bouyancy Blocks							\$7.50	each	8	\$60.00	1880	\$14,100.00	1880	\$14,805.00
Sail-making														
Cutting	\$40.00	2.10	493.5	\$19,740.00	473.76	\$20,529.60								
Main-sail cloth - Mylar							\$25.00	metres	4	\$100.00	940	\$23,500.00	987	\$25,908.75
Headsail cloth - Kevlar Fibre							\$35.00	metres	3	\$105.00	705	\$24,675.00	754	\$27,722.36
Glueing and stitching	\$40.00	2.30	540.5	\$21,620.00	524.285	\$22,484.80								
Rigging														
Rigging	\$30.00	5.75	1351.25	\$40,537.50	1297.2	\$42,159.00								
Rigging Set							\$3,200.00	One set	1	\$3,200.00	235	\$752,000.00	600	\$62,666.67
Storage, Packaging & Shipping	\$25.00	3.75	881.25	\$22,031.25	925.3125	\$23,573.44								
Weighted average hourly rate this MODEL	\$31.04													
Total standard/actual costs:		24.25	5699	\$176,896.25	5774	\$178,065.96				\$4,573.90	18730	\$1,074,866.50	1080565	\$1,251,762.75
Weighted average PLANT-WIDE Direct Labour Hourly Rate	\$30.87													
	* Note that the 'Units' in this column is the units of INPUT to each unit of output (eg there are 4 Bouyancy Blocks used each Model 3DSB Boat)													
	** Note that the 'Units Produced' referred to in this column refers to finished units of product (eg the standard cost of Bouyancy Blocks is \$30 per UNIT PRODUCED or 4 x \$7.40 each)													