



RiverOak Strategic Partners

Manston Airport Air Freight Hub

*Reviving strategic transport infrastructure to
maximise Global Britain's trading potential*

Applicant's commissioned Manston Airport Skills Need Report

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Manston Skills Need

Global Airport: Local Jobs

May 2021

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1 Introduction

Manston will be a freight-focused airport, serving the South East of the UK, including London, one of the world's largest conurbations. The COVID-19 pandemic has highlighted the fragility of the UK's reliance on passenger aircraft to carry freight. Even before the current crisis, somewhere approaching one million tonnes of air freight destined for or originating in the UK was trucked to and from European airports. Despite the need to re-issue the decision letter, the Secretary of State's decision, announced on the 9th July 2020, to approve the development of Manston Airport is testament to the need for Manston as a vital part of the UK's airport network. The South East must have a freight-focused airport if we are to safeguard supply lines in the future.

RSP commissioned Steve Matthews, an independent researcher and consultant with particular expertise in learning & skills, social economy and sustainability, to report on the need for the skills aligned to the creation of jobs at the airport and in the immediate supply chain. The final report was released in October 2019 and was based on information available at that time. The report was circulated to the MSE-Board and to other stakeholders. In particular, the East Kent College Group and Canterbury Christ Church University have used the report to assess the need for additional physical capacity (onsite training facility) and for potential course development. This report should be read in conjunction with the previous work by Steve Matthews, which is attached at Appendix 1.

It should also be noted that RSP intend to invite ex Manston employees and others who may be retired from a career in aviation to work as mentors or trainers, should they so wish. In this way, skills already in the area would be passed on to the next generation and many learners would benefit from their knowledge and experience.

1.1 Review of previous skills forecasting work

This report seeks to update the previous figures in light of new information regarding the potential for Manston Airport. A review of Steve Matthews' work shows the need to update the information on which the report was based, address a number of omissions, and provide information for the period before year 10, the year chosen for the earlier report. As such, year 5 forecasts are provided in this report.

Of course, since the previous skills need report was prepared the COVID-19 pandemic has caused global mayhem. In Kent, the tourism and visitor economy as well as the construction sector that have been among the hardest hit in East Kent and the County generally. These are the sectors that will need considerable support and aviation, also majorly disrupted and with many airports and airlines in severe financial distress, will play a key role in their recovery. It is therefore pertinent to review and revise the previous figures at this time. The aim is to reassess the need for skills at the airport and to inform all work that depends upon this data.

Both Kent County Council¹ and the Kent and Medway Economic Partnership² have produced recovery plans. Whilst neither mentions the role Manston as an air freight hub

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potentially creating jobs for thousands of people, the airport nonetheless has a key role to play. Leveraging the potential for the airport in terms of equipping young people with skills, and up-skilling and re-skilling the existing workforce should be a vital part of Kent's economic recovery.

Increasing skills levels to aid the economic recovery of the area is now more vital than ever. We start from a baseline where adult skill levels in Kent are generally below the National average, with levels in East Kent even more depressed, particularly in Thanet, as shown in Table 1. High value sectors of Manufacturing and Professional/Scientific/Technical are also generally under-represented in Kent and East Kent, highlighting the need for a sector such as aviation that can raise aspirations in terms of skills attainment, and stimulate inward investment and the location and growth of high value firms.

Table 1 Skills levels by % of adult population aged 16 to 64 in 2019

	Kent	Canterbury	Dover	Thanet	GB
NVQ4 or above	36.6	38.2	33.3	23.1	40.3
NVQ3 or above	55.9	64.5	52.3	49.0	58.5
NVQ2 or above	74.5	80.2	75.5	70.3	75.6

Source: ONS Survey Data

Red indicates below national average

1.2 Stansted Airport College

A visit to the Stansted Airport College on the 20th February 2020, highlighted the extent of demand for aviation-related training, which far exceeded the original estimates made by Harlow College. Indeed, the College is in the process of doubling the size of the facility.

Stansted College recommended engaging with local businesses in the aviation supply chain to establish what they need from 'work ready' potential employees. The numbers calculated before the college opened were clearly below the actual demand and this is a key point when calculating skills need for Manston.

1.3 Maritime and wind farm skills needs

Manston Airport is located close to the sea on the Strait of Dover between the Channel and the North Sea, close to the mouth of the Thames Estuary. Links between marine and aviation operations can, for some jobs such as certain engineering roles, be quite similar. Additionally, RSP are intent on developing routes to and from the airport to London using the river Thames. As such, there is a strong rationale for including maritime skills into the plans for the Manston training facility. Indeed, in 2005, Azimuth Associates prepared a marine and aviation vocational innovation concept (MAVRIC) for the East Kent Partnership.

This place-making concept aimed to realise the full economic, social and environmental potential of East Kent by capitalising on the unique geography of the area – its remarkable coastline and proximity to mainland Europe. This was to be achieved by creating a virtual framework for existing efforts and new investment in marine and aviation-related industries, supported by the delivery of relevant training to raise skills.

East Kent has a vibrant marine sector, which includes the Port of Dover, one of the busiest passenger ferry ports in the world, the ancient Cinque Ports of Sandwich, Dover, Hythe,

and New Romney, the working harbours of Whitstable, Ramsgate, Deal and Folkestone, leisure facilities at Margate, Broadstairs and Ramsgate, and many other sailing, rowing, motorboat and water-ski amenities as well as boat and ship builders all along the coast.

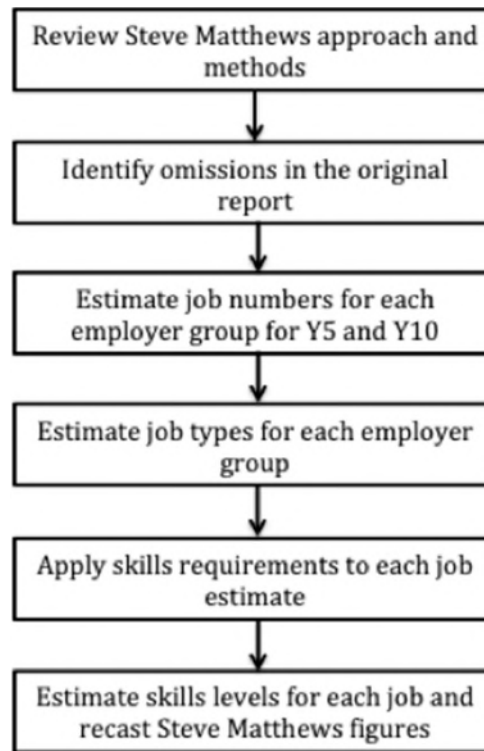
More recent years have seen the growth of off shore wind farms in the waters off the Kent coast. These include the London Array, the Thanet Wind Farm, and the Kentish Flats Offshore Wind Farm. Wind farms have with some cross over with marine and aviation in terms of skills, particularly in engineering. It seems, therefore, that there would be synergy in including wind farm training within the Manston training facility.

2 Approach

The flow chart in Figure 1 shows the steps in the approach taken to update the Steve Matthews report:

Figure 1

Approach taken to update the skills report for each additional employment sector group



The following sections consider each of the steps in the approach in turn.

3 Steve Matthews' methods

Steve Matthews says:

"The report is based on a workshop held with RiverOak and its aviation consultants to build a 'bottom up' model of employment on site, setting out the type of employers that are expected and the type and number of jobs that go with them; analysis of a range of employment and skills quantitative data sets to model occupations and skills associated with the types of employer identified; and depth interviews with experts and specialists in the field and desk research to build a more detailed picture of skills demand."

In terms of converting job numbers into job types and thereby into skills requirement, Steve Matthews says:

"in this report we have constructed and analysed an illustrative model of employment demand 10 years into the redevelopment project, with the aim of providing an indicative sense of the kind of skills that will be required and an order of magnitude for the scale of demand. This should be seen as a guide, not the definitive picture."

The employment model used to generate skills requirement is shown below in Figure 2. From this model, the previous skills forecast:

"translated these areas of economic activity into Standard Industrial Classifications (SIC 2007 codes) and looked at national statistics (the ONS Annual Population Survey and the Working Futures employment forecasting model) to estimate the likely occupational profile and employment dynamics in each area."

4 Additional job data

Steve Matthews report shows jobs as shown in Figure 2:

Figure 2 *Job numbers and categories identified by Steve Matthews*

Operator Passenger services Freight services Rescue and fire fighting services Airport operations Maintenance Motor transport Site and freight security Shuttle bus (station) Administration Retail Catering Car parking <u>Year 10 Jobs: 786</u>	Maintenance, Repair & Overhaul Company (MRO) #1 Engineering activities, subject to type of activities being supported. <u>Year 10 Jobs: 225</u>	Low-cost Carrier (LCC) #1 Mainly flight deck, cabin crew and crew source staff <u>Year 10 Jobs: 50</u>	Cruise Ship Flight Operator <u>Year 10 Jobs: 0</u>
	Maintenance, Repair & Overhaul Company (MRO) #2 Engineering activities, subject to type of activities being supported. <u>Year 10 Jobs: 225</u>	Low-cost Carrier (LCC) #2 Mainly flight deck, cabin crew and crew source staff <u>Year 10 Jobs: 50</u>	Charter Carrier (seasonal) <u>Year 10 Jobs: 0</u>
Air Traffic Services (ATC) (outsourced) Local activities mainly maintenance of specialist equipment <u>Year 10 Jobs: 6</u>	Maintenance, Repair & Overhaul Company (MRO) #1 Engineering activities, subject to type of activities being supported. <u>Year 10 Jobs: 50</u>	Freight 'New Integrator' High-tech warehousing and logistics activities <u>Year 10 Jobs: TBD</u>	Scheduled Operator (to link to Hub Airport) <u>Year 10 Jobs: 0</u>
	Aircraft Recycling Company Mainly engineering activities. <u>Year 10 Jobs: 75</u>	Regular Freight Operator Uses Operator warehousing, local staff <u>Year 10 Jobs: 2</u>	Live Animal Specialist Transport Company Varies by type of animals involved <u>Year 10 Jobs: 5</u>
		Border Inspection Post (animals, fruit & veg, fish, meat) Varies by what is being inspected <u>Year 10 Jobs: 10</u>	Customs, Immigration & Gov Activities (Borders Agency) Specific inspection and control activities <u>Year 10 Jobs: 20</u>

Examination of the categories of employment identified earlier show a number of areas that now need to be included:

- New integrator jobs
- Freight forwarders
- FBO operators including Helix Aviation
- Aircraft engine maintenance and repair
- Fuel farm and refuelling operations
- The Manston training facility
- Marine businesses
- Wind farms and other environmental companies

In addition, jobs in sectors that cut across and support/are supported by a vibrant aviation sector are covered in Section 6. Specifically, this report looks at tourism, leisure & hospitality, and at food processing.

5 Estimating job numbers in each category

Each employer type shown in the section above has been reviewed and updated with a forecast job number for years 5 and 10 using the most appropriate data available. These are summarised in section 5.9. Full details of job type and number are covered in Table 4 for years 5 and 10 of operation.

5.1 E-commerce and traditional integrators

One or more new-style integrators (such as Amazon) are expected to make up a considerable market for Manston Airport. As such, these businesses will generate a considerable number of onsite jobs with a variety of skills required. Rockford International Airport (RFD) is a comparable freight-focused airport in the Chicago area around 90 miles from O'Hare Airport.

At RFD, UPS employs around 4,000 employees at peak times. The full time to part time ratio is 35/65. At non-peak times the number falls to around 2,800. All jobs, full and part-time, are permanent with employees receiving benefits such as health care insurance.

At RFD, Amazon is currently recruiting an additional 1,400 employees to supplement their workforce of 900. At both Amazon and UPS, minimum pay is \$15.00 per hour.

It is worth noting that the number of indirect jobs created as a result of UPS/Amazon operations is estimated to be in excess of 2,000. These jobs include trucking, fuelling, and brokerage. This data will be included in the relevant job category in other sections.

In terms of the number of jobs used in this skills forecast, the higher peak time figure is taken since these are the number of people who will need the skills required to carry out the jobs created. As such, it seems reasonable to use a figure between the UPS and Amazon data. It is likely that Manston will attract at least one e-commerce 'new' style integrator and one more traditional integrator. Therefore, the employment numbers should be very similar to Rockford and this forecast shows 3,700 (900 plus 2,800) in Year 5 and 5,100 (2,300 plus 2,800) in Year 10. It is appreciated these figures are rather lower than the Rockford example and show only full-time equivalents.

5.2 Freight forwarders

With a busy airport operation, a number of freight forwarders are likely to have satellite offices at Manston, employing one or more members of staff per forwarder. The currently forecast has only two employees under this category. As such, this work forecasts 15 employees in total.

5.3 Fixed base operators

The presence of a fixed base operator (FBO) is an important part of plans for Manston Airport. FBO provides support services to general aviation operations, fuel sales, flying school, and executive and air taxi travel. The FBO operation may also include aircraft rental. Employees would include customer services, mechanics, avionics technicians, flight instructors, aircraft sales personnel, and managers. At present, Polar Helicopters and HelixAv operate from Manston. Together they employ around 13 people and this number would increase with the operation of the airport. With a fixed wing FBO together with the existing helicopter operators, a total employment figure of 30 in Year 5 and 40 by Year 10 is included in the forecast.

5.4 Aircraft engine maintenance and repair

AvMan is an engineering company engaged in aircraft engine overhaul. They are located on the Manston Airport site and will continue to operate once the airfield is reopened. With fully equipped facilities and the ability to transport aircraft engines by air, this type of business should be able to increase work and employees. AvMan currently employs 11 people including the Chairman, financial controller, quality control, engine shop manager, office manager, and a number of apprentices. It is possible (as previously stated in company press statements) that this could increase to 47 personnel. The company has found it difficult to employ suitable apprentices in the past and the presence of the training facility should help resolve this issue.

5.5 Fuel farm and refuelling operations

Rockford International Airport employs around 2,000 people in these fields (the figure was in excess of 2,000 but includes brokerage). RSP, as the operators of Manston Airport, are keen to use the Thames to transport goods to and from the airport to London by river. At this stage, only an estimate for the jobs created as a result of using the river for transportation can be made. In total, covering the fuel farm (50 jobs), trucking (50 jobs) and marine transportation including pilots, staff at Ramsgate Harbour, and staff at the London wharf/s (50 jobs) total around 120 in Year 5 and 150 in Year 10.

5.6 Training facility, museum, conference facility and innovation hub

Should this encompass all the facilities planned, including a conference centre and innovation hub alongside the training facilities, the number of jobs created would be substantial. An estimate of the increase in jobs is in the region of 45 in Year 5 and 75 in Year 10. This figure includes a wide range of skill sets including training and education, museum personnel, customer-facing staff, and facilities management.

5.7 Marine businesses

With a new tenant, Manston/RSP, in Ramsgate Harbour, and an increase in the vibrancy of the area, it is likely that marine companies may expand to take advantage of the interest in the sector and the ability to recruit interested, trained staff and to continue to develop skills locally. As such, the forecast for jobs in Year 5 is 50 with 150 by Year 10.

5.8 Wind farms and other environmental companies

Manston's location as a seaside airport allows for the growth of specialist, niche services to the aviation and marine sectors, particularly focusing on environmental solutions and innovations. The planned use of the Thames to transport freight between the airport and London can be expected to stimulate similar environmentally friendly solutions locally. The renewable energy sector is growing rapidly with offshore wind alone forecast to support 27,000 direct jobs by 2030³.

Vattenfall has three wind farms locally - Thanet, Kentish Flats and Kentish Flats Extension - with 75 people working from their base in Ramsgate Harbour. Although the Thanet Extension DCO was refused, wind farms in East Kent will continue to require a skilled workforce and the extension would increase job numbers and the requirement for skills. Jobs include technicians and support workers such as caterers and crews for service vessels. At present, manufacturing is not taking place locally but in a decade, with increased inward investment and local skills, this situation could change.

This is a growth sector that will need skilled people to ensure it reaches its potential in Kent. The forecast for Year 5 is therefore for 120 jobs and 250 by Year 10.

5.9 Recalculated total jobs

Table 2 shows the summary figures for employment by employer and for years 5 and 10. The figures shown in bold italics for Year 10 were those supplied by Steve Matthews in his earlier report.

Table 2 Employee numbers by employer for Y5 and Y10

Employer	Y5	Y10
Airport operator	696	786
ATC	6	6
MRO 1	225	225
MRO 2	0	225
MRO 3	50	50
Recycling	50	75
LCC 1	50	50
LCC 2	0	50
Freight operator	2	2
BIP	10	10
Cruise ship operator	0	0
Charter airline	0	0
Scheduled airline	0	0
Animal transport	5	5
Customs, Immigration etc.	15	20
Partial total:	1,109	1,504
New integrators	3,700	5,100
Freight forwarders	15	15
FBO	30	40
Aircraft engine maintenance and repair	47	47
Fuel farm and refuelling	120	150
Airport Academy	45	75
Marine businesses	50	150
Wind farms and environmental	120	250
Additional aviation and marine related jobs total:	4,127	5,827
Total:	5,236	7,331

6 Other related sectors

The job creation shown in the previous sections related to aviation-specific, marine, and related sectors. However, there are additional job creation opportunities in other sectors, particularly in tourism, leisure and hospitality, and in food processing that will also require skills. These jobs and their associated skills is dealt with separately from the previous sections since:

- a) Not all these jobs will require the type of skills that the Manston training facility would provide;
- b) East Kent College is fully equipped to provide training in these areas;
- c) The University for the Creative Arts, other HE providers, Adult Education and local training providers (including schools to some extent) may also be able to cover training in some of these areas.

Nonetheless, there will be some skills that may have sufficient overlap with the aviation and marine provision to be provided through the Manston facility. Additionally, there may be learners who would benefit from the location, ambience or facilities provided on the Manston site. The total jobs as described in the sections below for tourism, leisure and hospitality plus food processing give a total as shown in

Table 3 Total jobs numbers with related skills requirements

Previous total aviation jobs	1,109	1,504
Additional aviation and marine related jobs	4,127	5,827
Other related sectors	1,100	1,350
Total:	6,336	8,681
Total excluding previous report:	5,227	7,177

6.1 Tourism, leisure and hospitality

Whilst Manston will focus on airfreight, there will undoubtedly be an increase in leisure and hospitality jobs. With Thanet connected to the world, its beautiful beaches and countryside and those of neighbouring areas, particularly Dover and Canterbury, can be accessed more easily by overseas visitors. It is also likely that enterprising businesses, encouraged by the presence of the airport, will set up additional attractions and entertainment facilities for visitors. This category of jobs also includes catering, travel agencies, passenger transport and sport/recreation.

In 2018, there were 67,000 jobs in the tourism industry in Kent, with 6,500 of those in Thanet and 4,800 in Dover. The number of tourism enterprises totalled nearly 63,000 in Kent with almost 4,000 of those in Thanet and 3,480 in Dover⁴. Looking at a comparator airport (and it should be noted that no precise comparator exists), Cornwall Airport Newquay assessed that their operation created 83,500 trips 1,160 jobs and £28.1m in GVA based on July 2011 data⁵.

⁴ Strategic Commissioning Statistical Bulletin, March 2020

⁵

This forecast is focused on the skills required to support employment in this sector rather than on the additional jobs created. It is important to incorporate provision into the Manston training facility's offering. In particular, the demand aviation-related skills such as airline catering, cabin crew, and check-in staff need to be captured. There are undoubtedly a range of other skills that are transferrable from aviation/marine to the tourism, leisure and hospitality sector.

As we have seen from the Stansted Airport College, example, demand can be far higher than forecasts. It may also be possible, as with Stansted Airport College, that the airport setting encourages learners. The proportion of staff in the tourism, leisure and hospitality sector that are not proficient at their role - the skills gap density - is higher than the UK average by sector⁶ and therefore everything should be done to encourage upskilling. Tourism, leisure and hospitality is an important sector for the East Kent economy and skills need to be amongst the best to provide excellent services that customers now expect.

Dover District Council's 'Growth Strategy for Tourism and the Visitor Economy 2020 to 2030' includes the action to collaborate with local educational providers to increase the availability of tourism, service and hospitality training and skills development and associated opportunities. The intention is also to build extra capacity across the sector to increase employment within the district by supporting delivery and retention. The facility at Manston can assist with Dover District Council's plans, to encourage a pipeline of talent by focusing on training, apprenticeships, volunteering and mentoring.

The forecast for the number of jobs with a profile that fits the potential offering on the Manston site (not just new jobs created due to the operation of Manston Airport) for at least part of their training is forecast to be 100 in Year 5 and 150 in Year 10.

6.2 Food processing

The food and drink production industry is one of the UK's largest manufacturing sectors. Kent has 2,400 food and drink production enterprises, which has seen growth of 3.7% over the last five years⁷. Swale and Dover have some of the highest proportions of employees in food and drink production in the country, with Ashford having the highest concentration of food and drink production enterprises in Kent. The current total employed in the manufacture of food products and beverages in East Kent is:

Ashford	600
Canterbury	100
Dover	900
Swale	1,200
Thanet	200
	2,800

Manston has a history of importing fresh fruit, vegetables and flowers from around the world. These products will continue to form an important market for the reopened airport. As such, increases in local food processing companies could be expected. It may

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⁷ Strategic Commissioning Statistical Bulletin February 2020

also be possible for flower packaging/arranging to add value to products being transported via Manston.

Certain skills, such as engineering, electrical technicians, fork lift truck drivers, and logistics specialists, have overlaps with the aviation sector, particularly the airport. Since this is the case, a forecast for jobs in this area with these associated skills is included here. Year 5 is estimated as 1,000 and for Year 10, 1,200.

7 Job types for each area identified

To augment the work carried out by Steve Matthews, the additional jobs numbers identified above require breaking down into specific job types and occupational profile. Steve Matthews describes these steps as:

- Translating these areas of economic activity into SIC 2007 (Standard Industrial Classification) codes
- Using national statistics (the ONS Annual Population Survey and the Working Futures employment forecasting model) to estimate the likely occupational profile and employment dynamics in each area

This work is catalogued in the following sub-sections. From this information, the skills required can be approximated and this information is shown in Section 0.

7.1 Job types and SIC code of employer

Table 4 shows the classification of each additional job (post Steve Matthews report) using SIC 2007 codes.

Table 4 Job type and SIC code classification

Broad employment area	Employment area	Job estimate Y5	Job estimate Y10	Standard Industrial Classification for modelling
New integrators	Managers	100	150	51210 Freight air transport
	Finance and accounts	40	50	
	Supply chain & transportation	260	375	
	Fulfilment/pickers	1,500	2,180	
	Fork lift truck drivers	300	400	
	IT managers	20	25	
	IT support	40	50	
	Database administration	40	60	
	Data science/forecasting	10	15	
	Facilities management	40	60	
	Customer relations	100	150	
	Administration	50	75	

	Security and loss prevention managers	15	15	
	Security and loss prevention	45	60	
	Business development	30	50	
	Business intelligence	10	15	
	Planning	50	65	
	In-stock management (buyer, procurement)	200	250	
	Training and leadership development	30	45	
	Health & Safety	40	50	
	Medical PR, communications and community engagement	6	10	
	Engineering	60	75	
	Quality control	64	100	
	Drivers	150	175	
	Drivers	500	600	
	Total:	3,700	5,100	
Freight forwarders	Import/export clerks	6	6	52290 Other transportation support activities
	Sales staff	5	5	
	Admin staff	4	4	
	Total:	15	15	
FBO	Managers	1	1	52230 Service activities incidental to air transportation
	Pilots	5	10	
	Cabin crew	5	10	
	Maintenance	12	12	
	Hospitality	3	3	
	Sales and admin	2	2	
	Facilities and cleaning	1	1	
	Catering	1	1	
	Total:	30	40	
Aircraft engine maintenance and repair	Senior managers	2	2	30330 Overhaul of aircraft or aircraft engines

	Workshop manager	1	1	
	Quality manager	1	1	
	Purchasing manager	1	1	
	Financial manager	1	1	
	Stores supervisor	1	1	
	Senior engineers	3	3	
	Supervisors	4	4	
	Aircraft engine mechanics and trainees	13	13	
	Quality assurance engineers	2	2	
	Warehouse staff	2	2	
	Forklift drivers	2	2	
	Commercial salespersons	2	2	
	Accounts staff	3	3	
	Reception/admin/drivers	3	3	
	Cleaning/presentation staff	4	4	
	Facilities	1	1	
	Gardener/general labourer	1	1	
	Total:	47	47	
Fuel farm and refuelling	Transport managers	2	3	46711 Wholesale of petroleum and petroleum products 52230 Aircraft fuelling services
	Depot managers	2	3	
	Depot technicians	5	10	
	Routing co-ordinators	4	6	
	Drivers	40	45	
	Workshop managers	5	5	
	Mechanics	20	25	
	Health & Safety	4	6	
	Delivery technician	6	8	
	Fuel quality managers	2	2	
	Fuel quality technicians	6	8	
	Sales	8	10	
	Accounts	4	5	
	Administration	8	10	
	Maintenance	4	4	

	Total:	120	150	
Airport Academy and Museum	Museum staff including volunteers	10	15	91020 Museum activities
	Teaching and training staff	14	24	85590 Training providers
	Catering	5	15	56210 Catering
	Library	1	1	91011 Library activities
	Conference facility managers	4	4	68202 Letting and operating of conference and exhibition centres
	Conference facility staff	6	11	
	Facilities management	5	5	
	Total:	45	75	
Marine businesses				
Port of Ramsgate	Managers	4	8	52220 Service activities incidental to water transportation (including Terminal facilities operation (water transport))
	Port operatives	10	22	
	Drivers	4	10	
Shipping	Ship captain	4	10	50200 Sea and coastal freight water transport
	Ship crew	4	10	
Boat builders Marine engine maintenance, repair and overhaul	Boat builders	8	30	30110 Building of ships and floating structures
	Marine engineers	16	60	33150 Repair and maintenance of ships and boats
	Total:	50	150	
Wind farms and environmental				35110 Production of electricity
Offshore wind	Installation managers	2	2	
	Offshore coordinators	3	8	
	Electrical engineers	15	25	
	Mechanical engineers	15	25	

Other renewable energy and hydrogen	Project engineers	10	20	
	Boat pilots	8	12	
	Subsea divers	2	4	
	Health & Safety	1	2	
	Administration	3	6	
	Community engagement	1	2	
	Technology innovators	10	20	
	Project engineers	15	30	
	Engineers	20	60	
	Environmental scientists	5	20	
	Data analysts	3	5	
	Asset managers	5	5	
	Policy advisors	2	4	
	Total:	120	250	
Food processing	Quality control specialists	40	40	10390 Other processing and preserving of fruit and vegetables
	Managers	40	40	10890 Manufacture of other food products n.e.c.
	Supervisors	100	120	
	Food process engineering	370	400	
	Fork lift truck drivers	150	200	
	Electrical technicians	100	150	
	Logistics	100	150	
	Import/export customs/permits experts	50	50	
	Health & Safety	50	50	
	Total:	1,000	1,200	
Tourism, leisure and hospitality	Managers	10	10	79909 Other reservation service and related activities
	Cabin crew	25	45	51102 Non-scheduled passenger air transport
	Check in staff	10	15	52230 Service activities incidental to air transportation
	Airline catering	10	10	56290 Other food service activities

	Travel advisors	15	15	79110 Travel agency activities
	Conference and event management	10	20	68202 Letting and operating of conference and exhibition centres
	Passenger transport	10	20	49390 Other passenger land transport n.e.c.
	Visitor attraction management	10	15	91030 Operation of historical sites and buildings and similar visitor attractions
	Total:	100	150	
Overall Total:		5,227	7,177	

7.2 Broad occupation profile for additional jobs

- This section shows the forecast occupational profile, defined using the Standard Occupational Classification scheme (2010). Table 5 and Table 6 show the year 5 and year 10 estimates for each of the additional employment areas identified since the Steve Matthews' report.

Table 5 Occupation profile for Year 5

Broad Occupational Group (SOC 2010)	New integrators	Freight forwarders	FBO	Aircraft engine maintenance and repair	Fuel farm and refuelling	Airport Academy	Marine businesses	Wind farms and environmental	Food processing	Tourism, leisure and hospitality	Total
1. Managers and Senior Officials	100		1	2	6	4	4	17	40	10	184
2. Professionals	80			13	9	24	16	88	40		270
3. Associate professionals and Technical	935	6	5	1	20	11	14	11	770	10	1783
4. Administrative and Secretarial	50	4	2	6	8	1		3			74
5. Skilled Trades			13	14	29	5	8			10	79
6. Caring, leisure and other service occupations			8							25	33

7. Sales and Customer service	190	5		2	8			1			206
8. Process, plant and machine operatives	800			4	40		8		150	10	1012
9. Elementary occupations	1545		1	5						35	1586
Total:	3700	15	30	47	120	45	50	120	1000	100	5227

This analysis shows that:

- As with the Steve Matthews report, the associate professional and technical category is likely to be the largest occupational group
- Due to the level of elementary occupations involved with an ecommerce integrator, this group ranks much higher than the previous study
- Aside from the new integrator, other employment areas have a higher proportion of skilled employment need

Table 6 Occupation profile for Year 10

Broad Occupational Group (SOC 2010)	New integrators	Freight forwarders	FBO	Aircraft engine maintenance and repair	Fuel farm and refuelling	Airport Academy	Marine businesses	Wind farms and environmental	Food processing	Tourism, leisure and hospitality	Total
1. Managers and Senior Officials	150		1	2	8	4	8	27	40	10	250
2. Professionals	105			13	11	39	60	197	40		465
3. Associate professionals and Technical	1255	6	10	1	27	16	32	18	920	20	2305
4. Administrative and Secretarial	75	4	2	6	10	1		6		10	114
5. Skilled Trades			13	14	39	15	30			30	141
6. Caring, leisure and other service occupations			13								13
7. Sales and Customer service	275	5		2	10			2			294
8. Process, plant and machine operatives	1000			4	45		20		200	20	1289

9. Elementary occupations	2240	1	5							60	2306
Total:	5100	15	40	47	150	75	150	250	1200	150	7177

7.3 Total jobs created (including those previously included)

In order to provide a total picture of the skills need in jobs creation forecast, including those supported by the reopening of Manston Airport, Table 7 and Table 8 show the Year 5 and Year 10 figures by broad occupational profile. The Year 10 figures are directly taken from the work Steve Matthews did in October 2019. The Year 5 figures are extrapolated backwards from Steve's Year 10 figure.

Table 7 Year 5 total occupational profile

	1. Managers and Senior Officials	2. Professionals	3. Associate professionals and Technical	4. Administrative and Secretarial	5. Skilled Trades	6. Caring, leisure and other service occupations	7. Sales and Customer service	8. Process, plant and machine operatives	9. Elementary occupations	Total
Airport operator	56	45	90	35	55	110	30	100	130	651
Passenger operators	5	0	20	0	5	25	5	5	0	65
MRO	20	40	120	25	90	0	5	20	5	325
Other	10	0	15	9	9	0	10	5	10	68
New integrators	100	80	935	50	0	0	190	800	1545	3700
Freight forwarders	0	0	6	4	0	0	5	0	0	15
FBO	1	0	5	2	13	8	0	0	1	30
Aircraft engine maintenance and repair	2	13	1	6	14	0	2	4	5	47
Fuel farm and refuelling	6	9	20	8	29	0	8	40	0	120
Airport academy	4	24	11	1	5	0	0	0	0	45
Marine businesses	4	16	14	0	8	0	0	8	0	50
Wind farms and environmental	17	88	11	3	0	0	1	0	0	120
Food processing	40	40	770	0	0	0	0	150	0	1000
Tourism, leisure & hospitality	10	0	10	0	10	25	0	10	35	100
Total:	275	355	2028	143	238	168	256	1142	1731	6336

Table 8 Year 10 total occupational profile

	1. Managers and Senior Officials	2. Professionals	3. Associate professionals and Technical	4. Administrative and Secretarial	5. Skilled Trades	6. Caring, leisure and other service occupations	7. Sales and Customer service	8. Process, plant and machine operatives	9. Elementary occupations	Total
Airport operator	60	50	100	40	60	120	40	110	130	710
Passenger operators	10	0	30	0	10	50	10	10	0	120
MRO	50	80	150	50	180	0	10	40	10	570
Other	10	0	20	10	10	0	20	10	20	100
New integrators	150	105	1255	75	0	0	275	1000	2240	5100
Freight forwarders	0	0	6	4	0	0	5	0	0	15
FBO	1	0	10	2	13	13	0	0	1	40
Aircraft engine maintenance and repair	2	13	1	6	14	0	2	4	5	47
Fuel farm and refuelling	8	11	27	10	39	0	10	45	0	150
Airport academy	4	39	16	1	15	0	0	0	0	75
Marine businesses	8	60	32	0	30	0	0	20	0	150
Wind farms and environmental	27	197	18	6	0	0	2	0	0	250
Food processing	40	40	920	0	0	0	0	200	0	1200
Tourism, leisure & hospitality	10	0	20	10	30	0	0	20	60	150
Total:	380	595	2605	214	401	183	374	1459	2466	8677

7.4 Replacement demand by broad occupational group

Steve Matthews' report points out that, as well as 'growth demand', where new jobs are created as companies establish themselves on or near the Manston site, 'replacement demand' or churn also increases demand for skills. *"Replacement demand", ... refers to demand created by staff retiring or leaving the sector each year. This is the net additional requirement for staff and does not include job openings created when staff are promoted or move between employers or airports.*" (Manston Skills Needs Forecasting Report, page 9).

The previous skills report highlights that, “the government’s Working Futures employment model estimates this replacement demand to be between 3% and 5% per annum depending on the sector and occupational group.” Using the previous figures (see Manston Skills Needs Forecasting Report, page 9) and applying to the additional job creation forecast, shows that around 214 net additional posts would be created on-site year, based on Year 5 figures, as a result of churn (retirements, people moving out of the sector, etc.). For Year 10, the figure rises to around 294 net replacement posts per year. This is additional to the figure of 60 per year from Year 10 provided by Steve Matthews.

Table 9 Year 5 replacement demand by broad occupational group for additional jobs

Broad Occupational Group (SOC 2010)	Replacement demand per annum	Year 5 forecast	Replacement per year
1. Managers and Senior Officials	4%	184	7
2. Professionals	3%	270	8
3. Associate professionals and Technical	3%	1,783	53
4. Administrative and Secretarial	4%	74	3
5. Skilled Trades	3%	79	2
6. Caring, leisure and other service occupations	5%	33	2
7. Sales and Customer service	4%	206	8
8. Process, plant and machine operatives	5%	1,012	51
9. Elementary occupations	5%	1,586	79
Total:		5,227	214

Table 10 Year 10 replacement demand by broad occupational group for additional jobs

Broad Occupational Group (SOC 2010)	Replacement demand per annum	Year 10 forecast	Replacement
1. Managers and Senior Officials	4%	250	10
2. Professionals	3%	465	14
3. Associate professionals and Technical	3%	2,305	69
4. Administrative and Secretarial	4%	114	5
5. Skilled Trades	3%	141	4
6. Caring, leisure and other service occupations	5%	13	1
7. Sales and Customer service	4%	294	12
8. Process, plant and machine operatives	5%	1,289	64
9. Elementary occupations	5%	2,306	115
Total:		7,177	294

8 Skills need

Much of the work to identify specific skills need was included in the Steve Matthews report. This work showed a high need for engineering skills, around a third of the jobs considered at that time. This additional work and the inclusion of marine and wind farm sectors increase that demand considerably as Table 11 shows. It should be noted that the original calculation showed 540 engineering related posts but some classifications are not shown due to rounding, accounting for a difference (540-480) of 60 additional engineering posts.

Table 11 *Engineering related employment*

SOC	Description	Original	Additional
1121	Production managers and directors in manufacturing	30	
1123	Manager, installation, offshore		10
2121	Civil engineers	10	
2122	Mechanical engineers	20	90
2123	Electrical engineers		45
2124	Electronics engineers	20	50
2126	Design and development engineers	10	50
2129	Engineering professionals not elsewhere classified	10	35
2142	Environmental engineer		20
2461	Quality control and planning engineers	10	68
3112	Electrical and electronics technicians	20	25
3113	Engineering technicians	100	500
3114	Building and civil engineering technicians		2
3116	Planning, process and production technicians	10	
3550	Conservation and environmental associate professionals		10
3512	Aircraft pilots and flight engineers	40	29
3513	Boat/barge captain		22
5221	Metal machining setters/operators/robot operator	0	10
5223	Metal working production and maintenance fitters	10	
5232	Vehicle body builders and repairers	0	8
5235	Aircraft maintenance and related trades	160	38
5236	Boat and ship builders and repairers	0	30
5241	Electricians and electrical fitters	10	151
8111	Food and drink process operatives	0	120
8133	Routine inspectors and testers	20	100
8232	Marine and waterways transport operatives	0	22
Total:		480	1,435

However, a large proportion of the jobs included in this update report are 'new integrator' posts. Whilst there is a requirement for around 60 engineers by year 5 and 100 by year 10, as Table 4 shows (and that have been included in Table 11), the skills need covers a wide range of logistics-based occupations at a range of levels, including:

- Forklift truck driving
- Security loss and prevention

- Supply chain and transportation
- IT services including management, support, and database administration
- In-stock management including planning and procurement
- Data science, forecasting, and business intelligence
- Quality control

For young people, skills requirement will be at various levels including apprenticeship, FE and HE such that qualifications would cover:

- Apprenticeships at all levels
- NVQs
- T levels
- Degrees and higher degrees

There will also be a need to provide upskilling and reskilling opportunities for adults across a broad range of specialisms and this should be taken into account in planning the delivery of training. As such, blended learning, combining online educational materials with traditional classroom-based opportunities for interaction, may be appropriate, as may a mix of teaching and on-the-job training.

The Steve Matthews' report details the engineering related occupations for jobs previously defined (see figure 3.4 in his report). Aviation-specific courses that may be required to ensure a supply of skilled workers include:

- Apprenticeships in relevant technical specialisms including mechanical and electrical engineering
- Engineering Technician Mechatronics Maintenance Apprenticeship
- Aircraft Maintenance Fitter/Technician Apprenticeship
- Aviation Ground Specialist Apprenticeship
- Team Leader/Supervisor Apprenticeship
- Airside Operator Apprenticeship
- Aviation Ground Operative Apprenticeship
- Aviation Operations Manager Apprenticeship

In terms of non-aviation courses in professions associated with the operation of an airport the skills need would be in:

- Marine
- Wind farms and the environmental sector
- Hospitality
- Tourism
- Leisure
- Food Processing

In addition to the skills need noted by Steve Matthews and previously in this report, there would be considerable likely demand for training across a wide range of skills.

- Onsite training including Health & Safety, general skills such as communication, team-working, and organisation and planning
- Possible need for language skills – potential for centre to train aircraft pilots, marine crew, and those involved in import and export activities

- Basic skills such as literacy, numeracy and computer literacy

9 Conclusions

Previous work concluded that:

- Manston's workforce will be predominantly made up of people with low or intermediate levels of skills and qualifications;
- Graduates are likely to account for of the order of 10-15% of the workforce; and
- Most roles will probably require a good general level of education on entry and then require significant 'on the job' training.

However, this may underplay the need for graduate level employees, including higher-level apprenticeships, particularly in aircraft recycling and MRO operations, and the on-going training for employees with aspirations for career progression.

In Kent, higher-level qualifications are in short supply when compared to other areas in the South East. We must ensure we encourage the highest level of qualification for each person. In this way we can up-skill not only the Kent workforce but raise the aspirations and potential of businesses, supporting innovation and, instead of being the 'poor relation', matching or exceeding the performance of other part of the South East.