In June of 1294 Edward I decided to embark on the most ambitious and desperate campaign of his reign - the recovery of the Gascon lands seized by Philip IV, king of France. The plan drawn up by Edward and his war council called for a series of alliances with powers to the north of France. To increase the influence of the northern alliances, Edward also planned a campaign in Gascony to the south. Edward had taken the advice of a member of his war council, Anthony Bek, archbishop of Durham to, “Mount the war-horses, take your lance in your grip.”1 He would of course, have to make the necessary preparations before undertaking such an expedition. Edward was not going up against the leader of a rebellion in a small principality nor was he preparing to battle the leader of a small kingdom. He was, in fact, taking on Philip le Bel, one of the most well-funded and powerful monarchs of Europe. The corresponding logistics preparations would have to reflect this very real situation.

The strength of the thirteenth-century logistics process is evident in the acquisition and issue of supplies carried out by Edward’s household officials for the Gascon expedition of October 1294. The preparations for the Gascon campaign demonstrate the complexity of the logistics process and the ends to which the medieval logisticians went to ensure that the proper means were available to his king.

The preparations for the Gascon campaign began on 6 June when Edward convened a council of military tenants of the realm at Westminster. Edward’s past experiences told him that several months of preparation were required before a campaign could be launched successfully. The initial task was to begin the planning for and accumulation of the resources necessary to wage war. The first order of business was to determine the goals of the campaign, the number of men, horses, and the estimated length of the campaign. With these figures, the amount of supplies could then be calculated. Unfortunately, the details of the requirement calculations no longer survive, but enough circumstantial evidence exists to prove that they did take place. The proof of the planning is in the quantities of supplies purveyed and issued by a detachment of the royal household sent to Portsmouth to carry out the preparations.

**Acquisition**

A group of royal household officials was detached from the main household to conduct the acquisition and warehousing operations at the chosen port of embarkation. The logistics functions evident in these activities are supply (acquisition, storage and accountability), transportation (on the local and national scale) and general labour services. One of the important logistics aspects of the Edwardian household is evident here. The transition to war was simply an extension of everyday activities. Teams detached from the household conducted supply acquisition operations concurrently while the remaining members of the household continued with the routine duties. This allowed the household to continue functioning normally while the team in the field concentrated solely on purveyance for war. The team acted in concert under the guidance of a senior clerk and buyer conducting logistics support operations.

The team that went to Portsmouth was led by the experienced purveyors John of Maidstone, clerk of the Marshalsea, and Walter of Windsor, the king’s buyer. The concept of ‘team’ was extremely important, as the amount of interaction between the members was indicative of their success. William le Panetar, the king’s paneter,
Richard of Bromsgrove, clerk of the king's pantry, and Laurence le Poleter, the king's poulterer, were included as members of the team. Each of the clerks maintained separate accounts of their activities. Each man worked with the local sheriffs and bailiffs such as Stephen Justice, bailiff of Portsmouth, Robert of Glamorgan, sheriff of Sussex and Surrey, Walter of Gloucester, sheriff of Somerset and Dorset, and Richard of Aston, sheriff of Hampshire. For the Gascon preparations three scribes, five carpenters, twenty-four labourers, nineteen assistants or custodians, and six carters were hired full-time to assist the royal team. Additionally, Stephen Justice of Portsmouth hired as many as seventy-six carpenters on a weekly basis to prepare the ships. It was the close cooperation between the local officials and those of the household, developed during day-to-day activities, which eased the transition from peace to war.

The support operations for Gascony began in earnest on 13 June as the detachment from the royal household arrived at Portsmouth. This detachment had left London three days earlier stopping at Guildford and Winchester before arriving at Portsmouth where they immediately began to prepare for the arrival of the host. Houses, warehouses and other buildings near the port were acquired and modified to store supplies. Officials also made other arrangements such as the hiring of fields for the herds of sheep and cattle to graze in prior to shipment or slaughter. Hugo Bussey, a clerk of the kitchen, must have at this time, contacted Stephen Justice of Portsmouth. Portsmouth, as bailiff, was responsible for hiring carpenters to prepare impressed or hired ships for transporting men, horses, grain, and other supplies. The activity of the logistical support team is best detailed through the various items that they purchased. It is here that the first stage of the 'bean-field to battlefield' translation of economic power to military power can be observed.

**Walter of Windsor's account: beef, mutton, bacon and fish**

Walter of Windsor's account for purveyance for the first fleet is contained in a detailed, relatively neat and carefully computed document with some minor corrections. It is divided into five sections titled beef, mutton, bacon, aberdeen and finally, miscellaneous expenses.

Windsor's first actions upon arriving at Portsmouth were to arrange fields for pasturage and to prepare storage facilities for the items purveyed. He also hired two servants to watch over and repair the larder at 2d a day for ninety days, presumably beginning shortly after 13 June. Nails, knives, cord and wood were purchased to carry out these repairs. Either for preserving the carcasses or as an item for general distribution, 242 quarters of salt were bought from William Beneyt of Porchester for £18 10s.

Oxen or cows were purchased from a relatively widespread area. These locations were from as far away as Salisbury, Allington (near Salisbury), Marlborough, Devizes and as near to Portsmouth as Southampton, Farnham, Chichester as well as Portsmouth itself. Windsor purchased 430 head of cattle for a total of £228 9s 10½d. The pattern of purveyance that emerges is one where the live cattle were purchased at the various locations and driven to Portsmouth or Southampton. This is a matter of common sense as it was easier to have the cattle transport themselves on the hoof than to slaughter them and have to arrange transport for the carcasses. The driving of oxen was relatively inexpensive and one example notes that it cost 2s 4d for driving twenty-six oxen from Salisbury to Portsmouth over the course of three days. Once the oxen arrived at the ports, they were put to pasture to await slaughter. The animals slaughtered at Southampton were transported to Portsmouth either by land or water.

Purchase of mutton was conducted in a similar fashion. A total of 1573 head of
sheep were purchased for £118 18s 2½d. The sheep were purchased from places considerably closer than the places from where the oxen were purchased. The cities and towns where live sheep were purchased were Salisbury, Marlborough, Chichester and Southampton, while most of the sheep carcasses were purchased at Portsmouth.

The purchase of swine or pork is always in carcasses, or pre-slaughtered and preserved, in the form of cured pork or bacon which might mean an entire carcass. This is not made clear in the documentation but it is doubtful that the unit of issue is one side of a carcass as the half-units would then only be one quarter of a side. More than likely, ‘a bacon’ represented the entire carcass. Windsor purchased 210.5 bacons costing a total of £43 7s 1d. The cost of the bacon ranged from a low of 3s to a high of 5s 6d averaging 3s 6.3d per bacon. This may have had to do with the quality or size of the carcass. The bacon was purchased from a rather widespread area - wider, in fact, than that of oxen or sheep. Bacon was purchased from London, Guildford, Salisbury, Southampton and Winchester as well as from as far away as Carisbrook on the Isle of Wight and Kingston (either in Surrey, Hampshire or on the Isle of Wight). From London forty-seven bacons were purchased and transported in four carts to Portsmouth. This trip took three days (the same amount of time that the logistics support element took to travel from London to Portsmouth) and cost 13s 6d.

The purchase of fish, as recorded in Windsor’s account, is also extremely detailed. The price of the fish and the quantities purveyed were dependent on the type of fish bought. The most common type purchased for the Gascon campaign was Aberdeen, a type of stockfish also known as haburdene, but other types were acquired as well, such as conger eels and salmon. A total of 4565 Aberdeens, 807 salmon and 253 conger eels were purchased from as diverse locations as London, Shoreham and Southampton. From London the 1600 Aberdeens were transported in ten covered, oxen-drawn carts with racks at a cost of 66s 8d while the 687 salmon were transported from London in four carts at a cost of 26s 8d or 2s 2½d per cart.

Laurence le Poleter’s account: chicken, eggs and cheese
Laurence le Poleter’s account is a mouse-eaten, sloppily written and poorly computed document. His work began with renting either a house or a warehouse in Portsmouth and converting it into a large henhouse. This conversion entailed the installation of fencing and water and food troughs. Once the facilities were prepared, le Poleter purchased eighty-four cages in order to transfer the chickens from their place of purchase to Portsmouth. With these preparations complete, le Poleter purveyed the cocks and hens from Portsmouth, Salisbury, Winchester and the Isle of Wight. With the exception of the poultry purchased on the Isle of Wight, the birds were transported to Portsmouth in cages by eleven horses. The number of cocks and hens came to a total of 3774 birds.

The large number of chickens cooped up in a small area did not come without consequence - some 350 hens died of chicken murrain or drowning. There is no other information concerning the deaths of the birds, which kind of poultry was more susceptible, or when the murrain struck or the hen house was flooded. It is probable that the birds were purchased and transported alive because of the quickness in which slaughtered poultry flesh spoils and because live chickens can continue to lay eggs. Also detailed in this account is, coincidentally enough, the purchase of eggs.

Eggs were purchased in the same manner and from many of the same locations as poultry. The accounts do not distinguish what types of poultry eggs were purchased. From Salisbury 16,000 eggs were purchased and carried by 8 horses to Portsmouth, and another 6000 eggs were purchased at Winchester and carried by 3 horses to Portsmouth. From London 9980 eggs were purchased and carried by 12 horses to Portsmouth. From Southampton 9874 eggs were purchased and carried by 10 horses to Portsmouth.
Portsmouth. Finally, the last purchases, made at Portsmouth, were of 1700 eggs. Any preparations that le Poleter made for egg storage or transport were not detailed in the account. Eggs are subject to putrefaction and of the 23,700 eggs purveyed for Gascony, 5800, or 24 per cent of the total eggs purveyed, were lost due to breakage or spoilage. These figures do not take into account any eggs that the chickens may have laid. Any increase in the number of eggs would have, presumably, required an entry in le Poleter’s account.

Cheese, the other main item recorded in this document, is a peculiar item to be acquired with poultry and eggs. Eggs and chicken represent poultry and it is sensible for the same person to purchase them, but the only discernible similarity between eggs and cheese is their semi-perishable nature. Although it is unclear why le Poleter purveyed the cheese, it might have been because the storage methods for cheese were similar to that of eggs. Cheese was purchased by the ponder, which was equivalent to a hundred weight of cheese, or in this case, eighty cheeses. These cheeses were purchased at London for £6 13s 4d and carried to Portsmouth in two carriages. Other cheese purchases brought the total stored at Portsmouth to 19.5 ponders containing 169 cheeses. The acquired cheese suffered from pilferage, breakage and rot (as did other items), reducing stores by forty cheeses, leaving 129 cheeses which were later issued to the households of the king and other magnates.

Richard of Bromsgrove and Walter le Panetar's account: beans, wheat, flour and bread

Richard of Bromsgrove and Walter le Panetar purveyed wheat, flour, bread, and beans for the Gascon campaign and recorded their expenditures in the same account. After their arrival at Portsmouth these purveyors arranged for a warehouse to use as a granary. Like the other purveyors, le Panetar and Bromsgrove were assisted by local officials. Peter of Worldham, clerk of the sheriff of Sussex and Surrey, and Adam, clerk of the sheriff of Hampshire delivered the items purveyed on the local level to the royal officials. Their efforts touched many levels of society including the church, burgesses, merchants, as well as others. For example the parson of Petworth was forced to sell 3 quarters of wheat and William of Wytsand, burgess of Chichester, was forced to sell 102 quarters of wheat. These purchases seem to be made with the more aggressive form of acquisition called captas as opposed to emptas. This is an interesting distinction; captas is a form of seizure, arrest, forced purchase or prise as opposed to empta, which generally refers to simple purchases.

The first part of the document contains information regarding the acquisition of some 972.75 quarters of wheat and fifty quarters of beans at a cost ranging between 9s and 10s per quarter for wheat and 6s 8d per quarter for beans. The vendors of the wheat and beans, whether they were clerics, merchants or peasants were paid close to market prices for their goods.

Portsmouth, as it was the primary storage site, was the most convenient location for milling grain, but the task was spread out to Chichester, Southampton and Winchester as well. In addition to the 724.25 quarters milled at Portsmouth, there were an additional 125 quarters milled at Chichester, nineteen quarters milled at Southampton and thirty-three quarters milled at Winchester. Following the milling process the flour was sifted, bolted, and placed in tuns acquired locally or in sacks brought from London, after which it was transported to Portsmouth, costing an additional 2d per quarter of flour.

Bread was either purveyed in prepared form or baked from previously purchased wheat. Some £33 13s 2d worth of baked bread was purchased from several locations in
and around Portsmouth - namely Andover, Overton, and Winchester. Bread was also made from the king's wheat. One entry details the carriage of twenty quarters of the king’s wheat from Portsmouth to Chichester where it was baked into bread at a cost of 11 s 6d and then shipped back to Portsmouth.

The document records the sale of wheat to several men, including other members of the logistic support element. One of the purchases was made by le Poletter, who purchased four quarters at 9s per quarter and two additional quarters at 12s per quarter for chicken feed. This is noteworthy because it not only demonstrates intra-team co-operation, it also indicates that le Poletter did not get a discount despite being a member of the royal household.

**John of Maidstone's account: hay, oats, tuns and sacks**

John of Maidstone, clerk of the Marshalsea, was, in addition to his duties as leader of the logistical support element, responsible for purchasing fodder - hay and oats - for the campaign. He maintained several accounts, the first of which detailed the daily expenses of the team.12 Additional accounts detailed the purchases of hay, oats, tuns and sacks.13 The details in these documents also shed more light on the work of Maidstone who conducted his own purveyances in addition to receiving the goods procured by the local administration. The hay was used for two primary purposes: as litter spread on the floor of the ships and as fodder. As fodder it was used in both the Portsmouth and Gascon staging areas as well as on board ship, for feeding horses and live animals transported for food.

Purveyance of oats was accomplished in the manner of other purveyed grains, in conjunction with the local sheriff. Maidstone had several assistants who also conducted purveyance in the name of the king. Among these were Nicholas Avenario (the Havener), listed by name in a subsidiary document found inside the cover of the Maidstone's main wardrobe account.14 Nicholas was sent to the Isle of Wight to procure hay and his work is detailed in John of Maidstone’s account. The methods that he employed to carry out his tasks are clear. He, along with his assistants, travelled around to the various manors of the island purchasing hay, which was then carried to port facilities and from there shipped to Portsmouth.

Hay was purchased from all levels of society, but predominantly from individual landholders. The sales are listed by name and by total cost of hay purchased.15 Through this information, the total quantity and tonnage of hay, as well as the probable sale locations can be determined. However, this is not a 'cut and dried' calculation as the details presented in the document have to be converted before they are useful.

After the hay was purchased, it was hauled to centralised collection facilities located at several ports on the Isle of Wight. The distance and number of cartloads figured prominently in each negotiation of cost for transportation or carriage. Delivered to the collection facilities at the ports was a total of £53 4s 5d of hay in an estimated 805 carts. At the estimated tonnage the 805 cartloads would weigh somewhere between 200 tons (based on a ⁹ ton cart capacity) and 805 tons (based on a one-ton cart capacity). The purveyance of hay incurred further costs at the ports in the form of miscellaneous labour and materials. After arriving at the port, the hay had to be off-loaded from the carts, bundled, tied, carried aboard ships and then covered. Additional manpower was required to guard the hay and a scribe had to be hired to do the paperwork (parchment work). Materials such as string, canvas and bracing needed to be procured to secure the loads on board the ships.

The ports chosen to collect and ship the gathered hay were located at either
side of the Isle of Wight. Of these ports, Ryde is easily identified as being the modern port of the same name located on the eastern side of the Isle of Wight. The other port, 'Hardestak', is unidentifiable with any modern town or port but is presumably located on the western side of the island. There are two possible port locations based on the clustering of purchases, one on the south coast, and the other on the north. The possibility on the north coast, located in the vicinity of Hampstead farm, is the most likely site from a practical standpoint. A map detailing the locations of the purchases and the ports to which they were transported from gives a good overview of the logistics system from acquisition and collection to transportation and transhipping for continued movement to Portsmouth.

Hardestak was clearly an important port or storage facility as 563 of 805, or 70 per cent, of the cartloads of hay purveyed were shipped from there. What is evident in the mapping of these purchases is the complete coverage of the island the purveyors were able to achieve.

Maidstone was not only concerned with the purchase of hay, he was also concerned with the purchase of oats, which made up the largest fodder-related expense. The accounts for purveyance of oats begin with the entries of oats received from the sheriffs or their clerks. Maidstone lists amounts received from the sheriffs by county and region within the county. These entries continue for the areas of Sussex and Surrey, specifically Guildford, Farnham, Godalming and Haslemere. Some of these purchases must have been carried to Portsmouth by boat as there is an entry recording the cost to re-measure forty quarters of oats and for moving them from a ship into the granary.

The close co-ordination between the local and royal officials is demonstrated best in Maidstone's subsidiary documentation, found inside the cover of the main account.

Peter of Worldham purchased and paid for 264 quarters of oats. These oats, paid for out of the sheriff's account, cost £36 15s 8d. An additional 79.13 quarters of oats were purchased for Maidstone by William at Berghe, bailiff of Finchesdean. These particular purveyances were conducted for Richard of Aston, sheriff of Hampshire and the cost, £12 12.5d, was paid out of the sheriff's account. The purveyance for the first passage brought in 2686.75 quarters of oats.

In addition to fodder, Maidstone also gathered sacks, tuns and other necessaries. Sacks were used to transport grains and tuns were necessary for the transport of grain, flour, ale and water. Sacks were either purchased already made or canvas was purchased and then sewn together. Cord and string had to be purchased for the sewing of seams as well as for drawstrings. Of the 1761 sacks for the Gascon campaign, 1000 sacks were brought from London and 148 were procured locally in Portsmouth. At Winchester 370 sacks were manufactured from 760 ells of canvas while at Portsmouth another 243 sacks were made from 400 ells of canvas. Adam of Poveray organised the sack project at Winchester while John of Gett carried out the Portsmouth operations. The total cost of manufacturing the sacks was £12 5s, which equates to 30s per hundred sacks.

The handling of tuns was, by comparison slightly more difficult. Frequently, due to the bulk nature of empty tuns, they were transported as staves and hoops. Once they reached Portsmouth, the tuns were reassembled and repaired by hired carpenters who also made new covers for them. A total of 1024 empty tuns were collected for the expedition.

**Issue**
The logistics support team was not only responsible for purveyance, it was also responsible for issuing supplies to the troops gathered in the staging areas prior to
embarkation. At some point prior to 9 October when the first fleet sailed, the logistical support element began issuing supplies to the constables and retinue leaders in the army. The term “issue” did not always imply a free transfer of supplies. The cavalry retinues were issued fodder free of charge but they were charged for the food supplies for human consumption. The constables, on the other hand, were required to pay for the food they were issued for their infantry contingents. The issues total as follows: hay for 1537 horses, 2587.4 quarters of oats, 688 tuns, 1672 sacks, 137.9 quarters of wheat, 483.6 quarters of flour, 46.5 quarters of beans, £140 4s 6d worth of bread. Tables 1 and 2 demonstrate the manner in which the supplies were distributed to the leaders of the cavalry retinues and infantry contingents.

Of the issued items, hay, oats, sacks and tuns were issued free of charge while both the constables and retinue leaders paid for bread, flour, wheat and beans. There does not appear to be any particular reason for the difference except that Maidstone issued the items free of charge while Bromsgrove and le Panetar issued the items for a price. It may be that the restrictions against issuing free food to soldiers who were in the king’s pay were not applicable to fodder for horses. At any rate, these supplies were for the use of the soldiers during the voyage to Gascony. Maidstone issued tuns, oats and hay while Bromsgrove issued bread, flour and beans. What is missing from the records is the issue of beef, mutton, bacon, fish, chicken, eggs, and cheese collected by Windsor and le Poleter. It is uncertain whether these supplies were issued or transported to Gascony under royal control, or simply that the records of issue were separated from the rest of the document and lost.

Any purchase or distribution of beer, wine, or cider for the voyage is also mysteriously absent. There were, however, four empty tuns issued to each of the infantry contingents. If the empty tuns were filled with barley malt, sugar, and water then a weak alcohol could have been brewed for the journey. This may have been the case as one of the entries noted that one contingent was issued four tuns containing ale. Another possibility for the acquisition of alcohol is an undated 1294 entry in the Book of Prests, which details the purchase of £10 10s of cider (and bran flour) at Southampton by Peter of Chichester and its transfer to Portsmouth which may have been for the Gascon expedition. Conversely, it may just be that the records of wine, beer and cider issue are no longer extant.

The most interesting details of issue are the standard issues to the constables or centenars. Each one of these leaders received roughly the same quantity of empty tuns while beans, flour and bread were issued in similar ratios. The actual amounts of bread and flour were not necessarily equal, but on conversion the yield was similar for the other items there were two standard quantities issued. The most frequent issue was of 2 quarters of beans, 52 bushels of flour (6.5 quarters) and £5 2s 6d of bread. The only other issued amount was for 2.5 quarters of beans, 76 bushels of flour (9.5 quarters) and £2 17s 6d of bread. If a constable did not receive the authorised quantity of bread and beans, he received extra flour. The reason for the deviation is not clear, it may have been because of unavailability of bread or because of the constables’ need or desire for flour. It may also have had to do with the arrival times of the contingents in the staging areas or the conditions to which they were encamped. In one exceptional circumstance a constable only received 3 quarters of flour and 2.5 quarters of beans but in addition he was also issued an extra £1 17s 6d worth of bread and 15d in cash.

These details indicate a somewhat formulaic, per man (or per hundred men) calculation for each item with a definitive equivalency between bread, beans and flour issued. Calculations, using the 6.5 quarters of flour and based on an estimate of
one-hundred men per centenar or constable, work out to be approximately 0.52 bushels of flour, 1s of bread, and ½ of a bushel of beans per man. The time period over which these issues were supposed to feed the men is unclear from the documentation, however, using Michael Prestwich’s calculations from the Scottish garrison’s in 1300 as a basis, an estimate of the time planned for can be made. Prestwich notes that one bushel of wheat feeds twenty men per day, which equates to five bushels for one hundred men. At this rate the 6.5 and 9.5 quarters of wheat flour should last one-hundred men approximately 10.4 days and 15.2 days respectively. The bread issued does present a problem, as there is no daily estimate, yet a rough estimate may be made based on the quantity of flour used to make the bread. Again, basing these calculations on the 0.7d of bread baked per quarter of wheat flour the following estimates are made: £2 17s 6d and £5 2s 7d of bread are made from 60.86 bushels (7.61 quarters) and 108.5 bushels (13.56 quarters) respectively. These quantities when divided by the 5 bushels a day equal 12.18 and 21.6 days, again, respectively. The total number of days that these bread and flour issues will supply the drawing contingent for is 27.4 to 32 days. (12.2 + 15.2 and 21.6 + 10.4) The amount of supplies issued is key to proving that there were estimates and calculations made to determine the necessary quantities.

The costs for issue of bread, wheat and flour to both the knight's retinues and to the constables’ infantry contingents were the same. For wheat the cost was 12s per quarter, for flour 15s per quarter and, for beans, 6s 10d per quarter. As the initial cost of wheat calculated above was 8s 3.5d per quarter, this represents a gain of 3s 8.5d per quarter for wheat purchased. For flour the profit was even more substantial as milling cost 4d per quarter bringing the cost of wheat flour to 8s 7.5d. The flour was sold at 15s per quarter which represented a gain of 6s 4.5d. For wheat this equaled a profit of £25 11s 4.5d and for flour a profit of approximately £154 3s. The profit for beans was much more modest as it was purchased for 6s 8d per quarter and issued for 6s 10d per quarter, a mere profit of 2d per quarter which equated to 8s, barely enough to cover the costs of handling, transportation and storage. The net income from the sale of flour, wheat and beans came to £180 2s 4.5d, a handsome profit to say the least.

The constables and centenars only received part of the issue; the lords and their retinues received the other portion. There were a total of sixty-six retinues and they represented the largest portion of the contingent scheduled to depart for Gascony. These retinues were in the staging area in and around Portsmouth preparing for embarkation. These preparations included the drawing of supplies for the journey. Unlike the infantry contingents the cavalry retinues were of different sizes and the amount of supplies that were drawn varied. The size of the cavalry contingents was never given in terms of manpower, although the numbers of horses was recorded. Consequently there is no way to estimate the number of days for which the food was issued. The retinues did, however, draw quantities of hay for a definite number of horses that can be used in the calculations for the number of days the supplies are drawn for.

In addition to the hay for 1537 horses, the retinues drew large quantities of oats, flour, wheat and bread for the first passage. The total was 2587.4 quarters of oats, 137.9 quarters of wheat, £140 4s 6d of bread, 330 quarters of flour, 588 tuns and 1,670 sacks. Interestingly enough these contingents did not draw any beans. It is probable that they drew quantities of meat, poultry, fish, eggs and cheese collected by Windsor and le Poletier. The oats, however, give the real clue as to the length of time for the staging process and travel portion of the operation. One entry for John of Montfort’s retinue notes the time period as ‘for twenty-two days’ in the margin. This snippet of
information provides the necessary detail to calculate the quantity of oats per day and
the estimated length of time the contingent was prepared to subsist without re-supply.
Montfort’s contingent consisted of forty-three horses and was issued 53 quarters and 6
bushels or 1720 pecks (53.75 x 32 pecks/quarter) of oats. By dividing the 1720 pecks by
the twenty-two days stated, the calculation works out to be 78.18 pecks per day which,
when divided by the number of horses, equates to 1.82 pecks, or just under a ½ bushel
(0.45 bushel) per horse per day. With only a minor modification, applying this formula
to the amount of oats drawn by the other retinues returns a standard thirty-one-day
period. This amount is similar to the quantities estimated for the Scottish garrisons in
1300 where a war-horse was fed a half-bushel per day, but it varies from the amount
estimated for other types of horses fed at the rate of a peck of oats per horse per
night.26 Apparently, the estimate of fodder was based on the rate of consumption by
the war-horses. The difference in this instance may be due to the period of time that the
horses were on board ships where grazing was impossible. The calculated amount for
the Gascon voyage was identical to the amount of oats Maidstone was allowed for his
horses while he was purveying at Portsmouth. Stated specifically in his account is a
computation based on a per horse per night basis, *computato culibet equo per noctem
dimidia bussell*.27 The calculation of a thirty-one-day period encompassing the staging
and journey is important in the campaign planning process.

The total amount of oats purveyed came to 2686.75 quarters while the amount
issued came to a total of 2668.3 quarters. Adding in the 14.63 quarters for Maidstone’s
horses and 3.75 quarters lost in the granary the sum purveyed is within 0.07 quarters of
the amounts issued, evidence of remarkably accurate calculations. (See Table 3.)
The estimated time for the journey is important because the quantities of supplies
issued were calculated and planned based upon the entire journey from staging,
departure, sailing, disembarking and initial military operations all scheduled to last one
month. In fact, the fleet sailed on 4 or 5 October and was in combat in Gascony by 1
November when word was received by the king in England of the expedition’s initial
success in Gascony.

There are several conclusions that can be drawn from the logistics
preparations for the 1294 Gascon campaign. Planning did occur, the requirements were
calculated, and the preparations were extremely detailed and complex. The intense
preparations for the campaign are demonstrative of the complex calculations carried out
by Edward’s competent and experienced household officials. These calculations were
clearly made on a daily per man or per horse basis. Successful logistics preparations are
key to getting a campaign off on the right foot and the preparations conducted in the
summer of 1294 allowed the English to project combat power successfully into Gascony.
If the term ‘logistics’ had existed in 1294, then Anthony Bek might have advised, ‘Mount
the war-horses, take your lance in your grip, but don’t forget the logistics preparations
before you begin your trip!’

**Table 1: Examples of items issued to infantry contingents**

<table>
<thead>
<tr>
<th>Centenar/constable</th>
<th>Tuns (ea)</th>
<th>Flour (qrs)</th>
<th>Cost (s d)</th>
<th>Bread (s d)</th>
<th>Total Cost of issue £ s d</th>
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<tr>
<td>John de Leycester</td>
<td>4</td>
<td>6.5</td>
<td>15 0</td>
<td>102 6</td>
<td>10 17 1</td>
</tr>
<tr>
<td>John de la Roche</td>
<td>4</td>
<td>6.5</td>
<td>15 0</td>
<td>102 6</td>
<td>10 17 1</td>
</tr>
<tr>
<td>Name</td>
<td>Items</td>
<td>Units</td>
<td>Quantity</td>
<td>Price 1</td>
<td>Price 2</td>
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<td>--------</td>
<td>-------</td>
<td>----------</td>
<td>---------</td>
<td>---------</td>
</tr>
<tr>
<td>Robert de Aula</td>
<td>1</td>
<td></td>
<td>102.6</td>
<td>10.17</td>
<td>1</td>
</tr>
<tr>
<td>John de Stonham</td>
<td>1</td>
<td></td>
<td>57.6</td>
<td>10.17</td>
<td>1</td>
</tr>
<tr>
<td>Robert Rose</td>
<td>1</td>
<td></td>
<td>57.6</td>
<td>10.17</td>
<td>1</td>
</tr>
<tr>
<td>William Chamberlain</td>
<td>1</td>
<td></td>
<td>57.6</td>
<td>10.17</td>
<td>1</td>
</tr>
</tbody>
</table>

**Table 2: Examples of items issued to cavalry contingents**

<table>
<thead>
<tr>
<th>Receiver</th>
<th>Hay for horses</th>
<th>Oats (qtrs)</th>
<th>No. of days</th>
<th>Qtrs horse</th>
<th>Sacks</th>
<th>Tuns</th>
<th>Flour (qtrs)</th>
<th>Flour (cost/qtrs)</th>
<th>Bread (cost)</th>
<th>Wheat (qtrs)</th>
<th>Wheat (cost/qtrs)</th>
<th>Total Cost of Issue</th>
</tr>
</thead>
<tbody>
<tr>
<td>John de Brittany</td>
<td>30</td>
<td>52.5</td>
<td>31</td>
<td>1.8</td>
<td>52</td>
<td>17</td>
<td>8.4</td>
<td>15s 0d</td>
<td>34s 3d</td>
<td>1.8</td>
<td>8.4</td>
<td>£7 19s 10d</td>
</tr>
<tr>
<td>John de Saint John</td>
<td>108</td>
<td>189</td>
<td>31</td>
<td>1.8</td>
<td>79</td>
<td>43</td>
<td>126</td>
<td>15s 0d</td>
<td>139s 8d</td>
<td>80</td>
<td>12s 0d</td>
<td>£26 9s 8d</td>
</tr>
<tr>
<td>Henry de Lacy</td>
<td>228</td>
<td>400</td>
<td>31</td>
<td>1.8</td>
<td>200</td>
<td>80</td>
<td>78</td>
<td>15s 0d</td>
<td>139s 8d</td>
<td>80</td>
<td>12s 0d</td>
<td>£47 0s 4d</td>
</tr>
</tbody>
</table>

**Table 3: Oats: purveyed vs. issued (in quarters)**

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oats purveyed</td>
<td>2,686.75</td>
</tr>
<tr>
<td>Lost in the granary</td>
<td>3.75</td>
</tr>
<tr>
<td>Feed for horses</td>
<td>14.63</td>
</tr>
<tr>
<td>Total</td>
<td>2,686.68</td>
</tr>
<tr>
<td>Difference</td>
<td>0.07</td>
</tr>
</tbody>
</table>

**Endnotes**

3. E101 4/29. This weekly account details the daily living expenses as compiled by John of Maidstone for purveyance conducted at Portsmouth. It includes expenses for beer, chicken, meat, bread and other foodstuffs as well as expenses for candles, parchment, servants, carts and fodder. It is an interesting day-to-day account of the life of the team at Portsmouth. It begins on 10 June and continues on through to 18 November 1294.
5. E101 5/1. This account details the expenses of Stephen Justice of Portsmouth for modifying ships. It also includes his expenses for hiring servants and carpenters, and the purchase of wood, nails and other necessaries. The first portion of the document is missing, but presumably it begins on or about 13 June and continues on through mid-November, 1294. Bussey’s account no longer exists, but Justice’s account identifies him as a member of the royal household, mentions his activities but not the particulars of his expenditures.
8. M.C. Prestwich, *Armies and Warfare in the Middle Ages: The English Experience*
14. The document found inside of the cover is actually backup documentation for E101 4/30. To distinguish between the two documents, it will be referred to as E101 4/30(a). It contains the same information but in greater detail. For instance, Ricardo de Noutteleye in E 101 4/30 is listed as Ricardo de Nouteleye de Brekestone.
17. E 101 4/30 (a).
18. Ibid.
21. These charts are compiled from E101 4/30 and E101 5/4. A complete listing can be found in Mark Kennedy Vaughn, "'For Circumstances must Dictate the Proper Means': A Study in the History of Logistics with Special Reference to Thirteenth-Century England" (PhD thesis, University of Reading, October 1999), 507-9.
25. E 101 4/30 clearly states that the issues of hay and oats are for the first passage. E 101 5/1, detailing the preparations of the ships for horse transport, cites 1,566 horses. There are no explanations for these differences.
Sailors on long voyages had it even worse, subsisting mainly on ship's biscuit (similar to soldiers' hard bread) and salted beef or pork. The meat often stayed in casks for years before being opened, and was distinctly unappetizing: "It was of a stony hardness, fibrous, shrunken, dark, gristly, and glistening with salt crystals," as the British poet and historian John Masefield put it. A sailor handy with a knife could turn a chunk of salt beef into a box or other useful item.

In June of 1294 Edward I decided to embark on the most ambitious and desperate campaign of his reign – the recovery of the Gascon lands seized by Philip IV, king of France. The plan drawn up by Edward and his war council called for a series of alliances with powers to the north of France. To increase the influence of the northern alliances, Edward also planned a campaign in Gascony to the south. Edward had taken the advice of a member of his war council, Antho Fights are from horse and with lances. Yet most of the hits I land are rewarowed with a disappointing zero points damage. I am confused on how to fight properly. mount-and-blade-warband. Share. Improve this question. Also, even though this is a cheap tactic, aiming for the horse is often much easier than aiming for the person, especially since he'll then be on foot so it's much easier to hit him with a couched lance later on. Finally, if you can't cause any separation, then its time to pull out a sword (or pick one up from a fallen combatant) for some close up work. Finally, building up momentum before striking works with every weapon, but its critical with lances as they take a severe damage penalty at slow movement speeds. Share. Improve this answer. The preparations for the Gascon campaign demonstrate the complexity of the logistics process and the ends to which the medieval logistician went to ensure that the proper means were available to his king. The preparations for the Gascon campaign began on 6 June when Edward convened a council of military tenants of the realm at Westminster. Edward's past experiences told him that several months of preparation were required before a campaign could be launched successfully. The initial task was to begin the planning for and accumulation of the resources necessary to wage war.