Even for Thomas Butler, a seasoned captain of the Royal Navy, this voyage was a disaster almost from the moment they weighed anchor at Port Royal, Jamaica, September 3, 1695. Disease ravaged the crew. On September 13th he comments in his log, “our men dye very fast.” To add to the misery the weather turned from moderate winds to fresh gales. With the crew reduced by death and sickness it became difficult to manage the ship. The captain notes in his log on September 14, 1695:

*This 24 hours fair weather blowing fresh yesterday about 3 in ye afternoon we made ye Signall by hawling up Sailes and firing of Gunns for ye Squadron to stay for us they running away and Left us Disabled we had not above 7 men Well our Shipp increesing upon us by the water She made in the hold & we Left Distitute of all ability to pump it out our people being all dead and Sick and my Self wth my Distemper and ye Griefe I entertaind at those Dismall Calameties was in ye opinion of all a Dying Daily In ye Night we made Severall false fires but had no Return to it this morning we Spreed our Ensigne at the foretopmast Shrouds & fired Severall gunns but no Notice yett taken of us we then having 4 1/2 foot Water in hold our Gunner dyed this morning about 10 a Clock we buryed 17 men.*

Day by day Captain Butler records the number of deaths, a total of 125 from September 3rd through September 19th. On the 19th, the Commander of the Squadron having died, Butler became Commander and “was Carried on board ye Dunkirk.” Captain Soule of the Firebrand was transferred to take command of the Winchester, “he having ye Next pretention.” Captain Soule’s log has not survived but the sailing master’s log of the Winchester notes 15 more deaths September 20th through September 24th.

In the early morning hours of September 24th, a dark, rainy night with a fresh wind “blowing directly upon y/e shore,” the final disaster
befell the Winchester! The sailing master notes, "... before we could half wear her shee struck and sitt fast all the men w/h we had could not fueell the maintopsail."

Captain Butler in the log of the Dunkirk records:

At 12 last night wee Tack'd and stood to y/e Lieward ye Weather fair but y/e wind fresh wee met y/e WINCHESTER standing to y/e Florida shore N/ward & sometime after heard Gunns fir'd without Intermission by w/ch wee apprehend a farther addition to our increasing sorrows for wee did beleive y/e WINCHESTER was Run'd aground but could give them noe releife y/n y/e night being very dark & ye wind blowing directly upon y/e Shore ab/t break of day wee Tack'd & bore down & found y/e Winchester bueldg on a reife ab/t 3 Leagues from y/e Main wee having w/th us a Brigantine bound to New Yorke I man'd him & sent him to y/e WINCHESTER by w/ch means sav'd ab/t 100 sick & 10 well men wich were left of near 300 ylt came from Jamaica we could save nothing of Stores it being to dangerous lying imbayed on a Lee Shore. (The wind was ENE, and the latitude 25:40)4

In another account of the bilging the author states:

Some of her crew were brought off. Others were left to perish in the surf because they had broken into the spirit-room, and were hopelessly drunk!5

My interest in this ancient tragedy on the reef off Key Largo, September 24, 1695, began during conversations with Charles M. Brookfield, who with others raised some 34 cannon barrels and other artifacts from this wreck site in the winter of 1938-1939 and in June 1940.6 Some years after writing the account of this salvage operation, Brookfield was able to get photocopies of the Captain’s log and the sailingmaster’s log of the Winchester and the Captain’s log of the rescue ship, the Dunkirk. These provided new information and together with another salvage effort at the wreck site resulted in a second article about the wreck.7 In this article Brookfield points out the role sickness played in the catastrophe and states the sickness was scurvy. After having read the logs Brookfield kindly made available to me, this diagnosis did not seem a likely one. Brookfield challenged me to present a more acceptable hypothesis. Although, Charlie Brookfield did not live to see this article, as long as he was with us, he took great interest in my efforts and supplied materials and helpful advice.
First, some background information. Louis XIV of France annexed certain lands along the Rhine River in the late seventeenth century. This lead to the uniting of several countries including England (The League of Augsburg, 1686) who carried out an unsuccessful war against France (1688-1697). Although the major naval operations were in the Mediterranean and along the western coast of Europe, England sent small naval squadrons to harass the French in the West Indies in the years: 1690, 1691, 1693, and 1695. The Winchester was one of the West India Squadron in 1695. She was a Fourth Rate Ship of the Line, launched in April 1693 at a cost of 9,140 pounds sterling. She carried 60 guns, weighed 934 tons and carried a complement of 285 men.¹⁸

Replica of British Navy Fourth Rate Ship of the Line from about 1707. (Courtesy U.S. Navy Photo Lab, U.S. Naval Academy.)

Now for a look at the “sailormen” of the day and life aboard ship in the late seventeenth century. At that time the British Navy was a part time job for most of the officers and sailors. Each fall the ships returned to harbor in England where the officers were put on half pay status and the men were dismissed without pay until the following spring. Skeleton crews were left aboard the anchored ships and a few officers
remained as caretakers at the harbors. When winter had passed and the weather was again suitable for sailing and fighting, it was necessary to recruit each ship's company. Of course there were those who loved the sea and for whom it was their main livelihood, but they alone were not sufficient to man all the ships of the navy. This led to impressment laws and the business of press gangs. Not only was impressment allowed on land, but, also, the British naval captains were allowed to impress sailors off merchant ships of any nation, including their own, and off British navy ships of lesser rank. Prisoners were taken from jails and press gangs snatched men from pubs, brothels, city streets and even farms in the country. No effort was made to determine their state of health, cleanliness, or ability to work aboard ship. They were brought aboard ship, at times drunk and unconscious, in the only clothes they owned and often infested with lice and other vermin. No uniforms were furnished and no soap or fresh water provided for bathing. Frequently they brought with them tuberculosis, venereal disease, typhus, dysenteries, smallpox and other contagious diseases. If they died before the ship left harbor, the body might be sent ashore for burial. If they died underweigh the body was sewn up in the sailor's hammock and thrown overboard (buried) with or without the reading of a burial service. If the deceased was an officer or a civilian of prominence in the French or Spanish navy, they were often “buried in the bilge,” ie. in the sand or gravel that made up ballast, and the body thus returned to the homeland. This custom lead to foul odors which may be why it was never commonly practiced on British ships.

Ventilation aboard navy ships of that time was poor; indeed, it was almost nonexistent below the gun decks. Windscoops or wind sails were in use but were often of little help. Underweigh cannon ports must often be closed to keep out the sea. In ports where disease was a threat, it was a custom to close them on the side of the ship next to land to keep out contagion thought to emanate from swampy areas near the shore. Possibly the inability to ventilate the ship permitted the breeding of disease carrying mosquitoes which came aboard in disease ridden ports. Air vents from the bilge to the weather deck were not in use until about 1800.

Fresh water for drinking and cooking was a great problem. In the late seventeenth century the water allotment on navy ships was two quarts per day per man. This was carried in wooden casks. After a few weeks at sea, algae grew in the casks, giving the water a cloudy appearance and an unpleasant taste. However, when the algae later died
and sank to the bottom of the cask, the water again became clear and more palatable. Distillation of seawater was practiced in the early seventeenth century by Sir Richard Hawkins (1562-1622) during his circumnavigation of the globe, but was not commonly practiced until modern times. Beer, wine, spirits and rum were preferred by most of the sailors. Tea replaced beer in the British fleet in 1831 but rum and spirits continued to be issued regularly until the early 1960's. In the eighteenth century the ration was an eighth of a pint of rum at noon and at night; issued straight until 1740 after which it was diluted. Rum came to be the only liquor issued and in 1825 was reduced to an eighth of a pint dispensed only in the evening.  

Food was a major cause of complaints, sickness and death. William Cockbum, discussing the Distempers That are incident to Seafaring People, tells us the diet of His Majesty's Navy in 1696.

And first, the victual, allow'd them for their daily sustenance, are Pork and Pease on Sundays and Thursdays; on Mondays Oatmel (Burgoo) Butter and Cheese; on Tuesdays and Saturdays Beef and Pudding, or all Beef which they please; on Wednesdays and Fridays Butter and Cheese, or Oatmeal and Pease, and with all these abundance of Bread.

The bread mentioned was in the form of sea biscuits or hardtack and often infested with weevils. Indeed, some men were suspicious of hardtack that had no weevils; they considered it too poor even for the weevils!

In the Captain's log of the Winchester Thomas Butler records taking aboard the above items listed by Cockbum before setting sail from England. Although these items were supposedly available in quantity, they supplied almost no Vitamin C, and, thus, the frequency of scurvy on long sea voyages. In port fresh vegetables and fruits were often available, but some sailors were hesitant to eat them believing they were the cause of dysentery.

At this time in British naval history ships did not have cooks and a central galley. The food was issued to small groups of men who cooked it themselves on a wood fire in a sandbox under the overhang of the forecastle. Whether it was palatably prepared depended upon the skill of the cook and the weather; in bad weather fires could not be kindled lest the ship be set afire. Little improvement in the food service of sailors occurred until the development of canning and refrigeration in the nineteenth century.
We have previously discussed diseases that sailors brought aboard ship, now let's look at the diseases commonly seen aboard ships on long voyages. Venereal disease immediately comes to mind, the traditional disease of the sailor who has "a girl in every port." These were rampant in the days of the Winchester and some say one of them, syphilis, was taken to the old world by Columbus' sailors. Smallpox was a problem until some years after vaccination was introduced in 1798. Typhus was a major problem and was then known as "ship fever" or "jail fever." As we have mentioned above the sailors in the Winchester's day frequently came aboard with body lice infected with the typhus organism. Crawling from man to man these lice might easily infect the entire crew. Only after the navy instituted disinfection of ships, admission quarantine of new recruits, the issue of uniforms and the burning of the recruit's old clothing and the issue of soap, was this disease conquered.

The dysenteries were the bane of the sailor. At times these decimated crews, and, on at least one occasion, totally incapacitated the French fleet and spared England an invasion. Undoubtedly the precarious food and water supply of ships in the Winchester's day made them vulnerable to the dysenteries.

In the West Indies malaria was a problem. This was commonly acquired by men sent ashore to fill the ships casks. While it resulted in illness and disability, it was rarely a rapidly fatal illness. Nothing was known of the plasmodium that transmitted the disease or the role of the mosquito in transmission until nearly two hundred years later.

Scurvy is the disease most associated with ships and long sea voyages. Scurvy had been recognized as a disease entity as early as 1535. Sir John Hawkins, the great Elizabethan sea captain, said that during his twenty years in the British Navy 20,000 men had died of scurvy. Even as late as 1740-1744 during Lord Anson’s circumnavigation of the world, scurvy killed almost half the complement of his fleet. Although even in the Winchester's day, when possible, those sick with scurvy were put ashore and fed greens and fruits, the relationship to vitamin C was not to be known for another two hundred years.

The most terrifying pestilence, one for which the West Indies was particularly noted, was "yellow jack" or, as we call it today, yellow fever. This was first described among Columbus’ crew after the battle of Vega Real or Santo Cerro in Hispaniola, 1495. Today we know that yellow fever is caused by a virus which is transmitted by mosquitoes. In the late seventeenth century it was ascribed to vitiated air, miasmas
from swampy land or stagnant lagoons and to the pelagic zones of the ocean. The felling of trees and turning of soil of virgin forests was thought to cause yellow fever outbreaks. The author of a history of Jamaica published in 1774 specifically mentions "the lower part of Kingston, next the harbour" as a situation that "may generate bad fevers, or exasperate the symptoms of those disorders."

With this background in mind let us now trace the voyage of the Winchester to see if we can determine the origin of the disaster.

The West India Squadron sailed from England on January 23, 1695, as escort for fourteen transport ships, one store ship, one hospital ship and three private merchant ships. It was made up of Their Majestys' Ships: Dunkirk, Winchester, Ruby, Swan, Terrible, and Firebrand. In charge of army troops aboard these vessels was Colonel Luke Lillingston. The fleet stopped first at Madeira Island off the west coast of Africa, a possession of Portugal. After putting on wine the convoy sailed for the Lesser Antilles, arriving at Nevis and St. Christopher March 22, 1695. By this time sickness had already visited the fleet. Commissary Murrey noted in his journal the fleet had 700 well men, 400 sick men and that thus far 130 had died. Unfortunately he doesn't tell us the nature of the sickness.

On April 5th, the Squadron, now free of the ships they were escorting, set sail for Santo Domingo intent upon their assignment to harass the French in Haiti. By this time the sickness was much abated according to Murrey. The fleet assembled near the Santo Domingo-Haitian border and 150 soldiers under Major Lillingston (the Colonel’s brother) went ashore to march overland with a contingent of Spanish soldiers. Their assignment was to pillage, plunder and create havoc along the way and ultimately join the main forces in an assault on the French fort at Port-de-Paix. The fleet sailed westward finally anchoring five leagues east of Port-de-Paix. On June 7th, Commodore Wilmot landed with 700 sailors and joined the remnants of Major Lillingston’s force (now only forty men) and the Spanish force. Together they marched to Port-de-Paix. From June 7th to July 17th, they attacked and defeated the French, and pillaged the surrounding countryside. On July 17th, the British troops and sailors embarked for Port Royal, Jamaica via the Windward Passage.

The squadron dropped anchor at Port Royal on July 23rd, 1695. They were to remain in port until September 3rd. Up to this point there are very few deaths recorded in the logs of the Winchester although there is mention of sickness among the sailors that went ashore with Commodore Wilmot in Haiti.
Charlie Brookfield in front of the Biscayne Bay Yacht Club with material salvaged from the Winchester.

During the six weeks in harbor at Port Royal the Winchester was careened, scraped, caulked and tallowed and other repairs were made. Firewood, casks of water and barrels of foodstuffs were put aboard. The sick were early sent ashore to regain their health; on August 21st the Captain’s log notes: “...this day most of our Sick men Came on Board.” Presumably while ashore these men were fed the lush tropical fruits and vegetables for which Jamaica was known. Despite these efforts the log records at least one death daily while at Port Royal and a peak of five on August 10th.

The squadron weighed anchor on September 3rd, and began its slow voyage west and northwest to Cape Antonio. They rounded the western tip of Cuba and sailed northeast into the Straits of Florida
seeking the help of the Gulf Stream to carry them back to England. The daily number of deaths began to mount reaching a peak of twenty-five on September 16th. Captain Butler notes on this date the death of Commodore Wilmot who was on the Dunkirk indicating that other ships in the squadron were beset with sickness also.

In all according to the logs of the Winchester 35 died during the six weeks in harbor at Port Royal and 140 more died in the three weeks voyage from Port Royal to Key Largo.

What could the disease have been that caused such terrible carnage? Scurvy seems unlikely because it doesn’t kill with such rapidity and after six weeks in harbor at Jamaica it is likely the sailors’ vitamin C stores were replete. What about malaria? Malaria was common in the West Indies. Again malaria doesn’t usually kill with such rapidity. Typhus must be considered but it seems likely this would have come aboard the Winchester in England and would have become evident much earlier in the cruise. It could have been dysentery brought aboard in the puncheons of water at Port Royal. Dysentery was common in the West Indies and was a greatly feared disease. The mercant sailor, Edward Barlow (1672), speaks of “the bloody flukes (flux, a term for dysentery used at that time) being the rifest, which is seldom helped and killeth a lusty strong man in ten days.” This disease cannot be conclusively ruled out.

However, in the author’s opinion the most likely disease that led to the bilging of the Winchester was yellow fever. This disease was widely spoken of as the scourge of the West Indies. It was known to carry a high mortality, at times killing a man in less than twelve hours! The aggressiveness of this disease is vividly portrayed in an early account. The author states it:

... first assaults the Pacient very vehemently, with pain in the head and backe: and the bodie seeming yellow, is some signe thereof, and within 24 howres it is so torturous, that he that is possest therof, cannot sleep or rest, turning himselfe on either side, backe and bellie; burning in his back most extreamely. And when it growes to perfection, there will appeare red and blew spots upon the Pacients brest and wrists. And such persons as have not presently applied unto them, means requisite to prevent it, will be by the incomparable torment thereof, deprived of their wits. And multitudes have desparingly slaine and drowned themselves, that by losse of their lives, they might finish their terrestriall paine.
In support of yellow fever as the cause of the carnage are three bits of information. Commodore Wilmot who died on this voyage is said to have died of "the fever." A second bit of evidence is the statement by a Royal Navy historian that when the squadron left Jamaica, "the fever went with them." The final piece of evidence is the record that yellow fever was brought to Philadelphia from Jamaica in the fall of 1695.

It has often been said that in war disease kills more than cannons. This was strikingly true in the West Indies Squadron in 1695. In this case disease also resulted in the loss of the Winchester. The disease in question was likely yellow fever. The rust-pocked cannon barrels from the Winchester, one of which is to be found at the Historical Museum of Southern Florida and two of which are mounted on the lawn of the Biscayne Bay Yacht Club, bear mute testimony to this pestilence which continued to devastate the West Indies and Florida until the early years of this century.

NOTES

1. Much of the material upon which this article is based and the encouragement to write the article was provided by the late Mr. Charles M. Brookfield (1903 - 1988).
2. Journal in Their Majesties Ship Winchester, Saturday, 14 September 1695.
3. Sailingmaster's log of the Winchester, Tuesday, 24 September 1695.


14. Barlow’s Journal of His Life at Sea in King’s Ships, East and West Indiamen & Other Merchantmen From 1659 to 1703, Transcribed From the Original Manuscript by Basil Lubbock (London: Hurst & Blackett, Ltd., 1934) II: 209.


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