# **Explanatory Notes to accompany the British Southern Whale Fishery Voyage and Crew List databases – Version December 2020**

The BSW Voyage database of around 2,550 voyages draws extensively on data contained in Volumes 1 to 3 of *Ships Employed in the South Seas Trade* by A. G. E. Jones, indexed by Ian Nicholson and typed and prepared for publication by Mr. Jones sister, Gwyneth Jones.

Thanks are also due to Jane Clayton who compiled her own list of pre-1815 voyages to aid her own research and contributed information to 315 entries.

Grateful thanks also to Graeme Broxam (Hobart, Tasmania) of the Roebuck Society and Navarine Press for permission to re-purpose the original data.

The Crew List database of over 15,240 entries was created by Dale Chatwin.

#### Citation for databases

Compilers - Jones, A. G. E. (Tunbridge Wells, deceased); Chatwin, Dale (Brisbane, Australia); Richards, Rhys (Wellington, New Zealand)

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An earlier version of the data developed by John Nicholls (currently at Trinity College, Dublin) was previously hosted at the University of Hull.

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Susanne Jenks undertook copying work of the crew lists in BT98 in the Public Record Office in London. Many thanks to Chris Maxworthy (Sydney, Australia) for the introduction.

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Myra Stanbury (Western Australia Museum) for contributing the biography on the Bennett family, owners in the BSWF. Gary L. Sturgess and Kenneth Cozens for another owner biography. Dorothy M. Heinrich for the biography on Robert Clark Morgan. Jocelyn Chisholm for the biography on William Darby Brind.

Adrian Tschoegl, Philadelphia, who has been working through our data and creating in-depth profiles for vessels in the trade on Wikipedia. These Wikipedia entries detail previous and later lives of many BSWF vessels.

#### **General Information about the Voyage and Crew Databases**

Departure and return dates used are those most closely reflecting the actual sailing or arrival date – usually based on a 'Report' from Lloyds List. Log entries 'recording 'speakings' are usually depicted as 'Spoken by …'. For entries in the 1850s the <u>Shipping and Mercantile Gazette</u> was used to supplement <u>Lloyds List</u>. In the process of creating the indexes in SST1 Jones extracted over 15,000 reports.

Turn backs / returns to port have not been noted on departure unless the event was significant *i.e.* over a month delay. This is recorded in the Voyage Notes.

Where vessels relocated from London to Sydney or Hobart – a regular enough occurrence from the 1830s – the last London originating voyage is listed with a note that the vessel was now based out of the Colonies. Trying to include the colonial voyages proved quite problematic and is better dealt with in a separate Colonial whaling voyages database. An example is the *Betsy* of Leith which sailed as a transport to the colonies then undertook two whaling voyages from Sydney, returning to London and then departing on another voyage from London.

There are likely to be some vessels which though they had the pattern and appearance of having taken a whaling voyage were traders *i.e.* the *Prince Regent* which sailed twice to the Sandwich Islands. A matter which requires further investigation are the occasional increases in the number of voyages. Was this due to expansion into new grounds; cessation of hostilities; greater availability of capital and ships; or, were these not whaling or sealing voyages at all. It becomes especially complicated as voyages to Valparaiso and the coast of Peru could also have been for other reasons (trading for minerals or slaving).

In many instances the process of developing and inputting voyages into the database has revealed obvious gaps, unknown voyages or double voyages (*i.e.* where a cargo was transhipped and the vessel returned to whaling – usually Hawaii or a Colonial port such as Sydney or Hobart). Having a combination of resources to draw upon (*i.e.* Lloyds, the Bills of Entry, SADs for Australian and Pacific ports, and newspapers) has revealed many instances where the first or last voyage by a vessel was missed in Jones scan of Lloyds List and the Bills of Entry. Similarly, unknown voyages in the centre of a number of voyages (*i.e.* the *Foxhound*) have been revealed and have been able to be described. Often, a change of owner or master, is associated with these voyages being lost.

A Departure Year field has been added to enable some idea of total departures in a single year to be determined.

One must also note that owners, particularly the Enderby's and the Bennett's liked to perpetuate the same name across a number of vessels i.e. the Bennett vessels *Recovery* which both had long lives in the trade and the various *Rochester's* owned by A & J Hill in the 1820s and 1830s.

Masters as listed in crew lists (BT1/25 or BT98) or early sailing records were sometimes replaced prior to departure i.e. one master took the vessel down the River and then another took the vessel to the south seas. Similarly, mishaps and deaths on route could often result in a change of leadership. Known deaths where one master has replaced another are marked with a "//" in the Masters Field in the Voyage database. You can Search for all know deaths on board by typing "//" into the Masters Field. Misspellings and miss-communication impacts the quality of Masters data in

the Voyage database. Names in the Crew List database are of much higher quality and can be better relied upon.

Cargo information is mainly derived from the Enderby List (pre 1795 voyages) and for 1816 until the end of the trade from the Customs Bills of Entry. Bills of Entry were reported on the day or on the day after the cargo was measured by a Gauger and recorded by Customs. From the 1820s the Bills of Entry often recorded the cargo in at least two forms. A figure in Barrels or Casks (as measured by the Gauger or stated by the Master) and as a tonnage figure (presumably for the use of Customs to determine duties). Where logs exist they have shown that the Customs Bills of Entry is extremely reliable though usually a bit lower than the totals stated by the Masters. This is not surprising as oil was lost over time on board due to leakage etc. and Masters and whaling crew were not qualified Gaugers. In the BSWF Voyage dataset ALL forms of reports for the Cargo are included in the Cargo Field i.e. each form of report is a variation of the same total cargo figure i.e. 2600 barrels or 550 casks or 200 tons of oil. If the cargo is black (right) whale oil that is stated. Otherwise the oil is sperm oil.

Because crew lists and logs often included details of the previous vessel on which a whaleman sailed we have been able to "derive" over 1500 additional crew entries by taking the whaleman 'at his word'. The validity of this approach has been shown in many circumstance where we have been able to verify a whaleman's presence on a previous voyage.

#### **Measuring Oil**

It is important to remember that whale oil in the British trade was measured by volume NOT weight though many dealers in the London trade preferred to sell a gallon of oil as 7 1/2 lbs. Scoresby notes that this effectively benefited the dealer by around 3 ounces per gallon.

Prior to 1824 in the UK the volume of oil used "English Units" which had been standardised when the Queen Anne standard was introduced in 1707.

Prior to 1707 the measure was eight barrels, each of 35 gallons (equal to 42 wine gallons), comprising one tun of oil (*i.e.* 280 oil gallons OR 336 wine gallons). This can only have ever applied in the British Northern Whale Fishery as no trade to the south existed prior to 1775.

Post 1707 and the introduction of the Queen Anne standard the measure for a barrel shifted to 31.5 gallons or 252 gallons per tun. This is what the Colonial Americans used and it has remained the standard across their Oil Trade. These measures also remained the standard for Oil taken by the British and Trade in Great Britain.

One must remember that on a voyage probably no oil was ever stored in a single wooden barrel measuring 31.5 gallons nor in a 252 gallon (ie one tun) barrel or cask. Barrel and tun / ton were the measure of oil taken not the size of the actual wooden storage device. Barrels and casks were constructed to any size to fit with the storage capacity of the vessel. Wooden Barrels usually appear to have contained 2 or 3 barrels by measurement of oil and Casks (which were considerably larger) somewhere between 5 and 7 barrels of oil. Oil was constantly being re-coopered into larger casks on board which is why voyages of 2600 barrels (a measurement of volume and the figure recorded by the whalemen) were on arrival at the final destination report as around 550 casks *i.e.* the 550 Casks were the physical artefacts landed – containing the 2600 barrels of oil as total measurement. As mentioned above we have no measurements for the capacity of Tanks.

Post 1824, with the introduction of the Imperial System, a UK ton (tun was no longer used) was standardised to comprise 210 gallons though it appears that the trade continued to prefer its own measure (252 gallons at 31 ½ gallons per barrel) and simply substituted the work TON for TUN without making any adjustments or revising its practices. It may explain why we later find a Cask often equated to one ton of oil. Calculating landed cargoes in barrels and tuns against casks as measured by the Gauger nearly always approximates between six and six ½ barrels to a cask remembering that we only have such calculations post 1817 when Customs started publishing the Bills of Entry.

More broadly, it appears quite safe to equate the cargo of British and American whaling vessels without any adjustment when reported as barrels.

# Wine, Spirits, Cider, Vinegar, Oil and Honey measurements (pre 1824 – Queen Anne)

Measure	Equivalent
18 gallons	1 rundlet
31½ gallons	1 barrel
42 gallons	1 tierce
2 barrels (63 gallons)	1 hogshead
2 tierces (84 gallons)	1 puncheon
2 hogsheads or 3 tierces (126 gallons)	1 pipe or butt
2 pipes or 3 puncheons (252 gallons)	1 tun

### Measurements after 1824 - Imperial

Measure	Equivalent
15 Imperial gallons	1 rundlet
26¼ Imperial gallons	1 barrel
35 Imperial gallons	1 tierce
3½ rundlets or 2 barrels (52½ gallons)	1 hogshead
2 tierces (70 gallons)	1 puncheon
2 hogsheads or 3 tierces (105 gallons)	1 pipe or butt
2 pipes (210 gallons)	1 tun

Source: University of Nottingham -

http://www.nottingham.ac.uk/manuscriptsandspecialcollections/researchguidance/weightsandmeasures/volumes.aspx

#### **Key to Database Fields:**

There are two datasets. A Voyage dataset and a Crew dataset.

The Voyage database of around 2550 records contains extensive data on each voyage. The Field mapping has been generally designed to support comparison with work undertaken by the World Whaling History Project.

A Crew List database records entries for over 15,200 men sailings on BSWF vessels – mostly collected from crew lists and other Official Sources. In this dataset around 1,500 entries have been generated from Official Sources where the seaman has indicated they previously served on this vessel. In general this information has proved correct though the value in determining role is less reliable.

The databases are linked by a VoyageID number which is a combination of a Unique Ship Number and a Voyage Number e.g. 926.0 is the first voyage of the *William Nicol* in 1843 – 926.1 is the second voyage in 1847 and 926.2 is the third voyage in 1851. A look in the Crew List database will find lots of entries for Voyages 926.1 and 926.2.

## Voyage Database Fields – note that not ALL Fields are displayed in the Data Viewer – you may need to SHOW them

VoyageID - a Unique Ship number and a voyage number e.g. BV0926.0 is the first voyage of the William Nicol in 1843 – BV0926.1 is the second voyage in 1847 and BV0926.2 is the third voyage in 1851. A look in the Crew List database will find lots of crew entries for voyages BV0926.1 and BV0926.2

VoyageName – the name of the ship and the year it departed – standardised to reflect the most common form of the name *i.e.* Diana / Diane was often misspelt / confused. Different vessels with the same name can be differentiated using the VoyageID. The year the vessel sailed has been appended according to best information – this enables a Search to be conducted which will provide all departed voyages in a particular year.

Port – the vessels home port – London was by far the largest home port [around 95% of voyages] and where not known London has been assigned

Dock – essentially a record of the docks used in London. Surprisingly the Greenland Dock, a dock specifically for whaleships, does not appear to have been favoured [used by the Northern Fishery only?] A list of Docks are in SST1 and SST3 [see below for explanation of acronyms]

East / West - we know that American vessels overwhelmingly preferred to sail via the Horn once the Pacific grounds were established. It is clearly different for the British. Following the initial foray by the *Emilia* into the Pacific via the Horn the British fleet favoured the Horn primarily because of the wealth of whales to be taken around Peru. This focus on the Horn route continued during the Napoleonic Wars but during the first decade of the 1800s a period of exploitation of the western Pacific and Indian Oceans commenced with the British quickly coming to favour and prefer the following routes to the end of the trade in 1859: - Timor / Japans; NSW / New Zealand; or the Indian Ocean / Seychelles. This was encouraged by the gradual removal / lifting of the East India Company's monopoly on specific routes / regions in the sub-continent and China from 1802. It also reflected a preference to use Kupang or Sydney as places to reprovision.

Of the 2550 voyages in the database we know the preferred direction of sailing for about half of them. An initial focus in the early years of the trade was on the Atlantic (431 known voyages) with probably all pre-1790 voyages restricted to the Atlantic remembering this excludes the northern trade; from around 1790 a strong emphasis on the new Horn route with just over 400 known voyages in a very concentrated period of about 20 years; and, from about the middle of the first decade in the 1800s voyaging east of the Cape of Good Hope (near 500 voyages).

Guessing which way a vessel went has its issues – for instance when originally compiled the Henrietta on its 1837 and 1841 voyages based on ports of call might have been thought to have sailed via the Horn (i.e. west) but access to the crew lists show instead that the vessel sailed east through Timor straight to the Japans. In fact, on its 1841 voyage the vessel left London on 2 September 1841 and was in Copang [Kupang] Harbour by 2 February 1842.

Destination – a stated destination from Lloyds List or the most obvious first whaling ground visited

Grounds – identified whaling grounds frequented by a vessel. Derived from 'Pre-20<sup>th</sup> Century Sperm Whaling Grounds' CARP/HI/3 developed by John Bannister for the US National Marine Fisheries Service under Contract # 3-1540. This has been expanded to account for right whale grounds and sperm grounds specifically known to be frequented by the British Southern Whaling Fleet (see Appendix A at the end of this document) *i.e.* essentially a disaggregation of the China Sea & East Indies groupings used by Bannister.

Date sailed – the actual date a vessel departed in a year usually from Lloyds List but sometimes even more reliable sources. This is often missing.

Date returned - the actual date a vessel returned to its main port usually from Lloyds List but sometimes more reliable sources. This is often missing.

Days Out – a simple count of the number of days at sea where departure and return data are known.

Fate – records whether a vessel was Lost, Taken, Re-located or Condemned

Owner – the owner as identified usually from the Customs Bills of Entry or by the Enderby family [SST3]. Forms of owner name vary and in many instances vessels were owned in partnership with many smaller owners unidentified. As voyage lengths were shorter ownership appears to change hands more frequently in the earlier half of the trade. From the late 1820s two forms of ownership appear, full ownership (i.e. concentration) of vessels in fleets by shipowners like Joseph Somes, George Young and the Wigram and Green partnership (perpetuating and extending the Bennett and Mellish full ownership models); and, probably as a consequence of the risk due to lengthening voyages, fractional ownership amongst oil merchants, ship chandlers, agents and shipowners i.e. see the ownership records of the vessel *Samuel Enderby* 

Agent - from the Customs Bills of Entry [SST3]. The Agent trade was highly concentrated.

Cargo – aggregated cargo information most often from the Customs Bills of Entry [SST3] or information provided by the Enderby's. All equivalent forms of the cargo are reported in this single Field *i.e.* 2600 barrels or 550 casks or 200 tons of oil. They are essentiall different forms of the same total amount of oil. If not stated then the cargo can be assumed to be sperm whale oil. Includes amounts of *ambergris* where known.

Cargo bounty / Premium – the bounty paid to the most successful whalers prior to the early 1800s Cargo value – as determined by Enderby in his list of vessels pre-1800.

A series of Fields specific to different types of whale and seal outputs are present but the data is incomplete and mostly only pertains to pre-1795 voyages. The most reliable Field is the Cargo Field.

Sperm – if recorded if individually specified in the cargo manifest.

Whale oil – usually right whale oil if individually specified in the cargo manifest

Bone - recorded if individually specified in the cargo manifest.

Seal skins – recorded if individually specified in the cargo manifest.

Seal oil – recorded if individually specified in the cargo manifest.

Elephant oil - recorded if individually specified in the cargo manifest

Crew size – as recorded in an actual crew list [BT1/25] or BT98 or from the Customs Bills of Entry [SST3]

Crew list – links to the Crew List database if content available

Sources – resources consulted to establish where the whaler went and how successful it was [see end of article).

Reports – reports or "speakings" for the vessel as reported in Lloyds List or other sources. In the British Fishery often the only record of a Voyage is available.

MasterID – links the voyages of Masters who served in both the British and American fisheries. Currently estimated to be somewhere between 50 and 100 men.

Master – name of the captain usually from Lloyds List [SST1] or other sources [SST2 or SST3]. All instances from all sources are given separated by a single slash '/' as well as the known name where established. Misspelling were common. Deaths during the voyage or events which have required a change of master have been identified using a double slash *i.e.* "//". The Master names in the Crew List database are much more accurate

VesselID – links Vessels which served in both the British and American fisheries. Currently estimated to be less than 20 vessels

Ship – the name of the Vessel and variations of the name i.e. Ann or Anne where the Sources record different versions

Rig – from the various Registers of Shipping (quality Fair). The benefit of particular types of rig is disputed but it does appear that some ship rigged vessels were converted to barques / barks as they were reportedly easier to manage with a small crew

Tonnage (old) – pre early 1830s tonnages for vessels (quality Fair)

Tonnage (new) - post mid-1830s tonnages for vessels. The variation appears to have been around 5% from Old Tonnage (quality Fair)

Place built - from the various Registers of Shipping

Date built - from the Registers of Shipping (the quality of information in the two Registers of Shipping from the mid-1820s until their amalgamation in the early 1830s witnessed a considerable drop-off — owners disappeared, vessels were never removed or entries updated, some partnerships were split i.e Green in one Register and Wigram in the other!)

Vessel value – from Enderby's lists from the early 1800s. The value of vessel was recorded at the start of Voyage. Sale values are recorded in Notes were known

Notes – notes of relevance to the voyage. Usually a *precis* of the main events or extracted from a newspaper in the case of loss of the vessel, mutiny etc.

#### **Key to sources for Voyage Database:**

SST1 – Ships Employed in the South Seas Trade 1775- 1861 [Volume 1] - used primarily via Lloyds List entries to identify where the whalers went and to report on progress of the voyage

SST2 - Ships Employed in the South Seas Trade 1775- 1859 [Volume 2] – primarily used to identify owners, masters, date of build, rig and tonnage from the various Registers of Shipping

SST3 - Ships Employed in the South Seas Trade 1775- 1859 [Volume 3] – primarily used to identify vessels which went whaling and their cargoes. Contains cargo information from the Customs Bills of Entry

SSWF - Ships Employed in the South Sea Whale Fishery from Britain 1775 - 1815

LOG SHERMAN - Whaling Logbooks and Journals 1613 – 1927

LISLE – Six Voyages by Captain William Lisle (SPRI Whaling pamphlets vol 3 no. 1) – in the collection of the Royal Geographical Society (London)

LOG ?? ?? – with location and call number of the log in specific library collections

CGHGG – Cape of Good Hope Government Gazette

Bol – Bay of Islands Ships Arrivals and Departures

HNL – Honolulu Ships Arrivals and Departures

TAH – Tahiti Ships Arrivals and Departures

WP – Wikipedia (a colleague has spent an enormous amount of effort researching the careers of many vessels which served some of their careers in the trade – the quality of this data is extremely high)

STH – St Helena Arrivals and Departures

MIC – Foreign Ships in Micronesia

NMM – National Maritime Museum (UK)

NLA – National Library of Australia

NHA – Nantucket Historical Association Research Library Log Books

NBWM - New Bedford Whaling Museum

BT1/25 - records of the Board of Trade and of successor and related bodies 01 February 1805 to 30 June 1805

BT98 – crew list records for whaleships to the southern fishery from the Board of Trade 1830s to 1850. A notation on the crew list for the Harriett for 1837 suggests the "64" which appears on some lists *i.e.* 64/6152 may be the code for London.

ATSUU – A Trade So Uncontrollably Uncertain: a study of the British Southern Whale Fishery 1815 to 1860

AJCP – Australian Joint Copying Project – extensive microfilm collection of material relating to the Pacific and whaling

CotG – Cruise of the Gipsey

Corsair – Narrative of the Shipwreck of the Corsair

SG - Sydney Gazette

SH - Sydney Herald

SM – Sydney Monitor

SMG – Shipping and Mercantile Gazette (London)

ELMEC – El Mercurio (Valparaiso)

Campbell – A Voyage Round the World from 1806 to 1812 by Archibald Campbell (1822)

<u>Stavers Journal</u> – a record of the career of Thomas Reed Stavers with information on many other whaling members of the Stavers family – can be read online

Falklands - https://falklandstimeline.wordpress.com/

Most Australian and English newspapers are identified with their full title and date of entry

#### **Crew List Database Fields**

VoyageID - a Unique Ship number and a voyage number e.g. BV0926.0 is the first voyage of the William Nicol in 1843 – BV0926.1 is the second voyage in 1847 and BV0926.2 is the third voyage in 1851. A look in the Crew List database will find lots of crew entries for voyages BV0926.1 and BV0926.2

Voyage – the name of the ship and the year it departed – standardised to reflect the most common form of the name *i.e.* Diana / Diane was often misspelt / confused. Different vessels with the same name can be differentiated using the Voyage. The year the vessel sailed has been appended according to best information – this enables a Search to be conducted which will provide all departed voyages in a particular year.

First Name – first and sometimes middle name of the crew member – single named persons i.e. Bobby (where known) are listed in the Last Name Field

Last Name – surname of the crew member. Where crew members have a single name (usually islanders) e.g. 'Bobby' – it is listed as a surname.

Age – the age of the crew man where recorded or it can be estimated

Born - where born or sometimes ethnicity - sometimes the place of residence is stated

Role – the crew members position on the vessel. Multiple masters names are recorded separately where listed. Passengers are listed where known.

Last served – last vessel served on where known

Notes – general information pertaining to the life of the crewmen including death/ injury if occurred on the voyage

Source – resources consulted to establish who sailed on the vessel including crew lists, logs and newspaper reports. Where data has been "derived" from a source (i.e. when previous vessel was recorded such as in BT898 crew lists) a lower-case 'd' has been appended i.e. BT98d.

Seaman ticket – introduced in 1845 and enabled a seaman to carry with him a note of his service and character. The system was replaced by the Third Register of Seamen in 1854.

Vessel – ship name

VesselID - links Vessels which served in both the British and American fisheries. Currently estimated to be less than 20 vessels

#### **Key to sources for Crew List Database:**

BT 1/25 - Board of Trade crew lists from the PRO usually from the period 1804 to 1806

BT98 or BT98d - Board of Trade crew lists from the PRO usually from the period 1830 to 1855. BT98d records have been <u>derived</u> from BT98 Crew Lists of Vessels on which a whaleman previously sailed.

ADMPR – Admiralty Protections from Impressment for the period 1777 to 1791 [ADM 7/389] and 1793 to 1811 [ADM 7/650] as extracted and compiled by A G E Jones as Part II of Ships Employed in the South Seas Trade 1775 – 1859 [aka as Volume 2] on pp 264 to 418 exclusive of Protections for the Greenland Fishery

BSWFDB - sourced from the British Southern Whale Fishery Database

NSW Muster Lists – crew lists recorded for vessels calling at Sydney 1818 to 1825

Hobart Muster Lists - - crew lists recorded for vessels calling at Hobart in the 1820s and 1830s

WD – Whales and Destiny by Edouard A. Stackpole

VRN - Vital Records of Nantucket

BGR - Barney Genealogical Record [Nantucket Historical Association]

ANDB - Australian National Dictionary of Biography

NM - Nautical Magazine

Other sources as noted i.e. Ships Log or Journal; newspapers; Court proceedings etc.

<u>Stavers Journal</u> – a record of the career of Thomas Reed Stavers with information on many other whaling members of the Stavers family – can be read online

### Appendix A: Whaling Grounds used in the BSWF Database

Based on *Pre-20<sup>th</sup> Century Sperm Whaling Grounds* by John Bannister [CARP / HI / 3] enhanced for the waters around Indonesia and New Guinea as there were a number of discernable grounds frequented by the British whaling fleet.

PACIFIC	SOUTH ATLANTIC	INDIAN OCEAN	
Coast of Chile	Coast of Brazil	Delagoa Bay	
Onshore	Brazil Banks	Seychelles - Mahe Banks	
Callao	Falklands	Coast of Arabia	
Galapagos	South Georgia	Zanzibar	
New Zealand	South Shetlands	Crozet Islands	
Macquarie Island	Patagonia	Desolation Isle (Kerguelen)	
Auckland Islands	Coast of Africa	Coast of New Holland	
Offshore	Walvis Bay		
On the Line [W]	Saldanha Bay	NORTH ATLANTIC	
On the Line [E]	False Banks	Hatteras	
Fiji-Samoa-Tonga	Plane	Western Ground	
Middle Ground	Carroll	The Shoals	
Tuamotus	Ascension	Gulf of Guinea	
Across21-27°S	Pigeon	Western Islands	
New Guinea (North and East)	Tristan - C of Good Hope	Southern Ground	
China Sea		Canaries-African Coast	
Timor Straits		Charleston	
Moluccas		San Antonio	
Panama Bay		Caribbean Sea	
Coast of Japan		Gulf of Mexico	
Japan Ground		Commodore Morris	
Bonin Islands		Steen	
Hawaiian Islands		Portugal/Spain	
Northwest Coast		Cornell	
California Coast		Twelve-Forty	