

## Vessel Management Plan 2013/2018

**THE TACOMA PRESERVATION SOCIETY**

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AUSTRALIAN NATIONAL MARITIME MUSEUM ANMM**

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***Conserving Unique and Historic Ships***

John Kearon

Head of Shipkeeping, Industrial and Land Transport Conservation

Merseyside Maritime Museum,

National Museums and Galleries on Merseyside. Liverpool, England.

“the only way to preserve these ships in the long term is to man and maintain them as if they were in service, but with the added consideration and attention to detail of the conservator.”

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## Section 1 Introduction

### *1.1 Introduction*

The *MFV TACOMA* Vessel Management Plan (VMP) outlines procedures, summarises tasks and makes recommendations to ensure that the integrity of *MFV TACOMA* is maintained as to both its configuration and interpretation, and that it remains structurally sound, weather resistant and watertight. The VMP determines the need for *TACOMA* to be floating, operational and available to support visitor programs, including visitor access on board, while on display at the Lincoln Cove Marina.

The *MFV TACOMA* VMP is developed within the framework of the Barcelona Charter. 2002.

The *MFV TACOMA* VMP has been developed with assistance and advice from the Australian National Maritime Museum.

Updated and detailed operational procedures are included in Section 10 of the VMP. All on-water management is under the direction of the elected committee of the Tacoma Preservation Society.

### *Summary of recommendations*

The *MFV TACOMA* Vessel Management Plan recommends that:

- *MFV TACOMA* be eventually configured to represent the early stage of the Southern Bluefin Tuna industry, following full research
- *MFV TACOMA* be opened regularly to visitors as resources permit
- *MFV TACOMA* be outfitted with props and equipment to interpret it as a working tuna poling vessel of the 1950's
- the stages of *MFV TACOMA* working life be researched for a further report
- oral histories be made with previous crew, cannery workers, radio operators, spotter pilots and others who have been associated with *MFV TACOMA*
- a photographic history of *MFV TACOMA* and the associated tuna era be developed, with images and film digitised onto a data base mmapss 2009
- research papers be developed to document the Tuna industry in the context of maritime environment and industries.
- key elements of the tuna industries be drawn out of the *MFV TACOMA* story and integrated through onshore and onboard interpretation mmapps application 2012

- the existence and location of all documentation associated with *MFV TACOMA* historical, archival, and documentation associated with the condition and operation of the vessel - is to be documented in the database.
- all artefacts associated with the Tacoma to be housed in an onshore facility - such a facility to be developed as budget allocations allow.see vision statement
- an electronic planning database be established that can be accessed by managers and vessels, volunteer crew and Visitor Programs, in order to track the progress of maintenance and future public access
- *MFV TACOMA* be assessed and cleaned regularly in accordance with schedules outlined in this document and the Tacoma Preservation Society committee's project plans

### ***1.2 Review of significance including comparative craft***

*MFV TACOMA* was the first purpose built tuna vessel in Australia to fish for tuna. It is an excellent example of Australian ingenuity and adaptation from its rolled steel bow to the effective use of Australian hard woods. The determination of three young fishermen in taking on such a large undertaking serves as an example for all generations. The three men, aged 31, 27 and 25 years old, took on a task that was complex and daunting. Its long survival is in part due to the original material and building methods employed, and also because of its retention of ownership in one fishing family. *MFV TACOMA'S* design was chosen because it offered the advantage of flexibility with a large clear back deck. For southern shark, salmon, seine, tuna seine, poling and trawling for prawns, its deck configuration and trawl seine winch allowed the vessel to convert to three major differing fishing uses without major modification or negative impact in the practical fishing effectiveness. In essence, an all purpose vessel design; a rarity in fishing vessel design.

Tuna clippers, which operated out of Port Lincoln for three or four decades after World War II, underwent changes of propulsion and configuration in response to developments in the tuna industry. Its present configuration as a prawn trawler is easily modified to represent the first development in tuna poling /purse-seining. Port Lincoln has remained Australia's major tuna port after challengers Eden and Esperance have long faded in their importance. Port Lincoln is now the most important Southern Bluefin fisheries sources in the world, with an annual quota of 4,500 t after the reduction in the Japanese long-line fleet in 2006. some 700 japanees longliners have been decommissioned

*TACOMA's* principal significance is that it was the vessel which established the tuna fishing industry in Southern Australian waters, based in Port Lincoln in South Australia in 1952. This has led to Port Lincoln, over the years since the *TACOMA'S* arrival, becoming one of the largest and economically most important fishing ports in Australia, with a gross tonnage of 80000 t valued at \$400M of all species of fish and shellfish. This makes Port Lincoln unique in its diversity of seafood product from prawns to tuna.

*MFV TACOMA* has the distinction of being the vessel, which in 1953 landed Australia's, first catch of Southern Bluefin tuna using purse-seine.

It has the advantage of having been acquired as a working vessel, in complete condition and in genuine working configuration,(as a prawn vessel) with an intact set of documentation including the first letter to the American design office.

*MFV TACOMA* is the only example of a Tuna vessel that is floating within a collection in Australia, indeed the world. Several different Tuna vessels are floating, but little is known about the early fleets of the 1950's (see Section 4).

*MFV TACOMA* has, as it's sister or near sister, from the same yard and in the Tacoma Washington register, the *WESTERN EXPLORER* and also the vessel John Steinbeck made famous with his book *The Log from the Sea of Cortez*, *THE WESTERN FLYER*. *Western flyer* is now after an attempt to restor her destined to be a display inside a seafood restruant

*TACOMAS SISTERSHIP the Stanford*

*WAS LOST OFF THE CALIFORNIA COAST IN 1956*



**PHOTO 1**  
*WESTERN EXPLORER*



**PHOTO 2**  
*WESTERN FLYER*



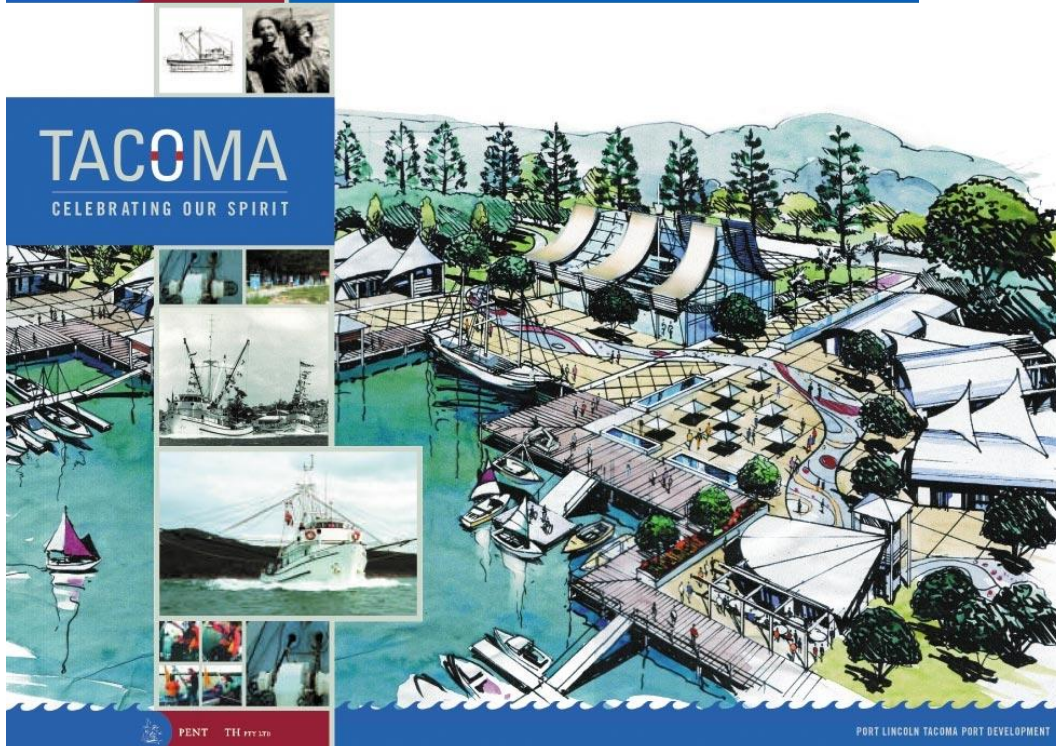
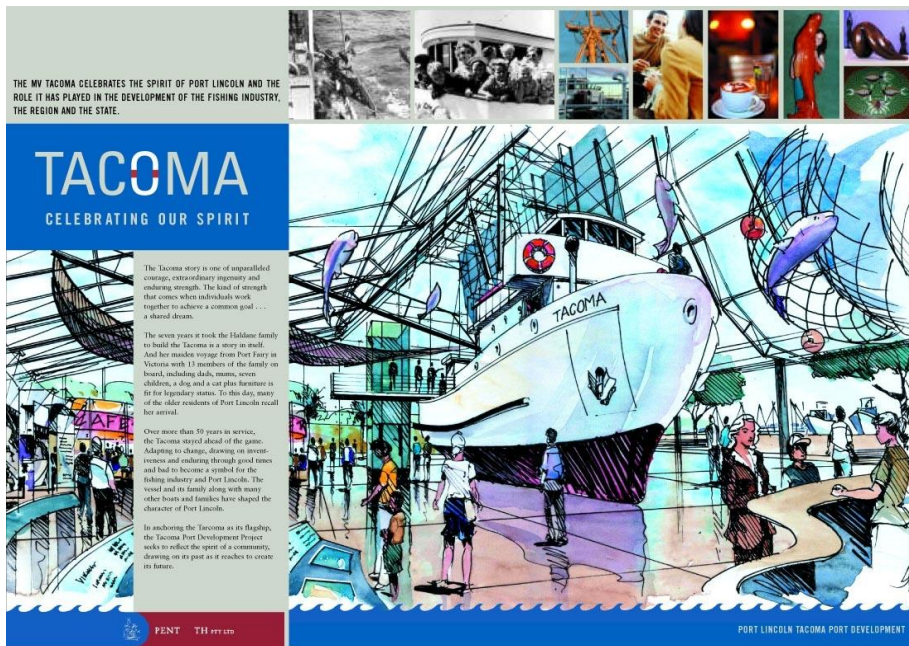


*Western flyer refloated looking sad*

### ***1.3 Background***

*MFV TACOMA* was owned by the Haldane families. She was decommissioned by the family in December 2002 and replaced with the new 22m steel factory Prawn trawler *ATLAS*. After decommissioning, which included the removal of trawl booms, refrigeration, processing and grading equipment, *MFV TACOMA* was offered to the City of Port Lincoln as a tribute to her significance in the social and economic development of the City. Over a period of three years several options for the vessel were explored, from a \$55m major waterfront development on the foreshore of Port Lincoln, to a concept by the local Axel Stenross museum for a dry dock facility funded by a family gift of \$100,000.





The proposal was to link *MFV TACOMA* to the Axel Stenross Museum growing fishing industry display. It was advertised for tender in National fishing magazines as a working vessel, however only one unacceptable offer was received. As a moving, floating vessel, the Tacoma attracted the interest of like-minded volunteers and resulted in the development of this VMP.



A major part of this plan is the vessel's ability to be maintained and interpreted in the water as a significant floating element of moveable, cultural heritage.



Although *MFV TACOMA*' physical condition and configuration have been maintained at a very satisfactory level, the greatest need is to outfit it and to expand knowledge of the details of its working life, for the purpose of educational, tourism and other interpretation programs.

This plan is current for a 3-5 year period during which further research should be conducted on the changes to the vessel over its life. This will inform the review of the VMP in five years' time.

#### ***1.4 Current condition***

*MFV TACOMA* is in good physical condition. *TACOMA* is berthed in the Lincoln Cove Marina. Good long-term maintenance has ensured that the topsides have remained in good condition, apart from some recent drying out of exposed timbers. See surveyors report, appendix J.

Three years of restoration have resulted in the following major work being carried out

- Stern built in
- bait tank trunks
- steel racks
- Glass deck
- Mast lengthened and crows nest fitted all painted
- Bow refastened 1/3
- Survey to 1E 2B 3B equipment supplied
- Aga stove installed
- Public address system
- Loading ramp
- Axualery engine fitted

- Shower & crew bunks
- Hull striped and re painted all rot made good
- Extension to anchor chain
- Galley floor replaced
- Black water system installed
- Gps installed
- Storage boxes fitted
- All ropes replaced
- Surf boat & flatty loaded
- 20 t ballast loaded

### ***1.5 Preservation philosophy***

The aim is to maintain the original material and character of the vessel. The Preservation Society group have materials, equipment and tools to maintain *MFV TACOMA* in its present condition within a five-year budget framework. The location of the vessel at North Quay allows limited conservation work to be undertaken. For any major work, Two commercial slipways are actively operating that would be capable of conducting such work.

### ***1.6 Interpretation philosophy***

It is recommended that *MFV TACOMA* be maintained in its present configuration, in a structurally sound, weather-resistant and watertight condition. This will ensure that a good baseline is maintained if future changes are made to the vessel. It will also allow the overall integrity of the *MFV TACOMA* to be preserved. Further information is needed about the original construction and changes that have been made throughout the life of the vessel. The forward section of the vessel remains almost in original condition, while the aft deck area has undergone many adaptations in line with the vessels changing fishing methods. The dragger trawl winch is from the original fit out. It is therefore recommended that the current configuration of the *MFV TACOMA*, be preserved at this stage, as it allows for the operation of the vessel without any expensive modifications. A detailed research program will be undertaken to determine the configuration and fit-out of the vessel at the important stages of its career, as a basis for future interpretation.



PHOTO 3 LIVE BAIT CONFIGURATION

## Section 2 Vessel Description

### 2.1 Vessel description

*MFV TACOMA* was built in Port Fairy, Victoria from 1944 to 1951 by the Haldane brothers William 31, Alan 27 and Hugh 25 for use in the pelagic fisheries of Southern Australia. It is properly described as a tuna clipper, although these vessels were often converted. The word clipper derives from the American terminology. In the north west they were called clippers while in the south they were bait boats or seiners. It has certain features distinctive to the American West coast seiner's clear aft beck with forward wheelhouse and crows nest. Uniquely, Tacoma has a steel rolled bow differing from the straight stemmed design of the American West coast. It appears that the earliest steel bows were in the mid 1940s and Tacoma may have the distinction of being the first to fit such a system. The timber construction of the stern was designed by the Haldane builders.



The vessel is 25.6 metres long. It is carvel built, with the hull of Jarrah planking over spotted gum ribs and stringers, with White Gum, Oregon and Blue Gum used for other elements. The masts and spars are now steel. It contains tanks with seawater for brine chilling of prawns. The prawn booms have been removed and are in storage. The wheelhouse and deck house are as original. It has a variable pitch propeller. The boat was powered by a 240hp Atlas Diesel engine, which has since been replaced with a 500hp Grenaa diesel. It also has two radios, an echo sounder and autopilot. Some of the latter equipment has been removed and stored to avoid deterioration from exposure to the open air.

*MFV TACOMA* originally carried the hull number 84, then L01, and now she carries P38 which has been transferred to her replacement Atlas. The port of registration is Port Adelaide, the detail of which is carved into the stern timbers. This was on the vessel when the PS group acquired it in 2007. However the number changed at least three times.

*MFV TACOMA* is a current vessel on the Australian Registry of Ships.

Registered:	29/08/1951
Official number:	178482
Home port:	Port Adelaide
Tonnage certificate type:	British
Gross tonnage:	128.77 tons
Net/registered tonnage:	85.09 tons

Tacoma is a tuna clipper and one of the few early examples of this type still surviving in Australia. Some were built specifically to catch tuna, while up to 100 timber vessels participated in the Bluefin fishery on both the east coast and in the Great Australian Bight.

## ***2.2 Technical specifications***

**Table 1 Specifications *MFV Tacoma***

Fishing No.84, then L01 1952 FITOUT

	<i>Imperial Measure</i>	<i>Metric Measure</i>
<b><i>Hull</i></b>		
Length	84'	25.6m
Breadth	21'6"	6.58m
Depth	10'	3.05m
Displacement to waterline	161.3 ton	164 tonnes
Displacement light ship	149.59 ton	152 tonnes
Hull	Wood	
Keel and keelson	Blue gum	
Main deck beams, frames	Blue gum	
Rib	Spotted gum	
Planking below waterline	Jarrah 2¼"	51.4mm
Planking above waterline	Oregon 2¼"	51.4mm
Deck planking	Oregon 3"	76mm
Hull lining throughout	Oregon 3"	76mm



- Wheelhouse and living quarters lined with polished silky oak and Queensland maple ply
- 13 bunks for crew, each fitted with curtains and lighting
- Galley fitted with AGA cooker, freezer, stainless steel tops and sink

	<i>Imperial Measure</i>	<i>Metric Measure</i>
Motor		
American <i>Atlas Imperial</i> diesel	240hp	179kw
4 cyl 275rpm, speed 8.5-9 knots per		
hour	19 ton	19.3 tonnes
Weight	8 ton	8.13 tonnes
Crankcase	2 ton	2.03 tonnes
Flywheel	750lb	31.78kg
Conrod and piston	13"	33.02mm
Bore	16"	40.64mm
Stroke	28hp	20.8kw
Auxiliary Motor - <i>Crossley</i>	4½" diameter	114.3mm
Propeller shaft <sup>2</sup>	14'6" long	4.7 metres

Steering gear - <i>Donkin</i>	68"	1727mm
Propeller - <i>Bruntons Ltd</i>		

#### ***Net***

Purse seine net		
300 fathoms x 30 fathoms deep		
Weight	11 ton	11.18 tonnes
Mesh		
top two thirds	4"	101.6mm
balance	8"	20.32mm

	<i>Imperial Measure</i>	<i>Metric Measure</i>
Anchors – <i>Dreadnought</i>	2 x 8cwt each	2 x 406.4kg each
Fuel capacity	4,000 galls	18 190 litres
Storage	80-120 tons	81.28-21.9 tonnes
Turntable on stern	24' x 24'	7.3 x 7.3 metres
Communications - AWA transmitter & receiver	1,000 mile range	1 609km range
Echo sounder - <i>Kelvin Hughes</i>		

- Fire protection: large bank of CO<sup>2</sup> (carbon dioxide) bottles
- Bridge fitted with both internal and external steering positions, plus external binnacle

*Tacoma* re motored in the winter of 1971.

Official Number	178452
Fishing Number	P38
Class of vessel	3B

	<i>Imperial Measure</i>	<i>Metric Measure</i>
Makers: <i>Grenaahaven</i> , Denmark		
Main motor: <i>Grenaa</i>	500hp @ 500rpm	366kw
Developing	4 ton bollard pull	4.03 tonnes
Weight	9 ton	9.14 tonnes
	10 knots	

### Speed

Auxiliary motors: 2x6cyl *Perkins*  
diesel for alternators

Propeller shaft

5.31" diameter

135mm

14' 6" long

4.7 metres

59"

1 498mm

Variable Pitch Propeller

3-4 knots per hour

Trawling speed

30,864.2lbs

14 000kg in 6 hours

Plate Freezer capacity

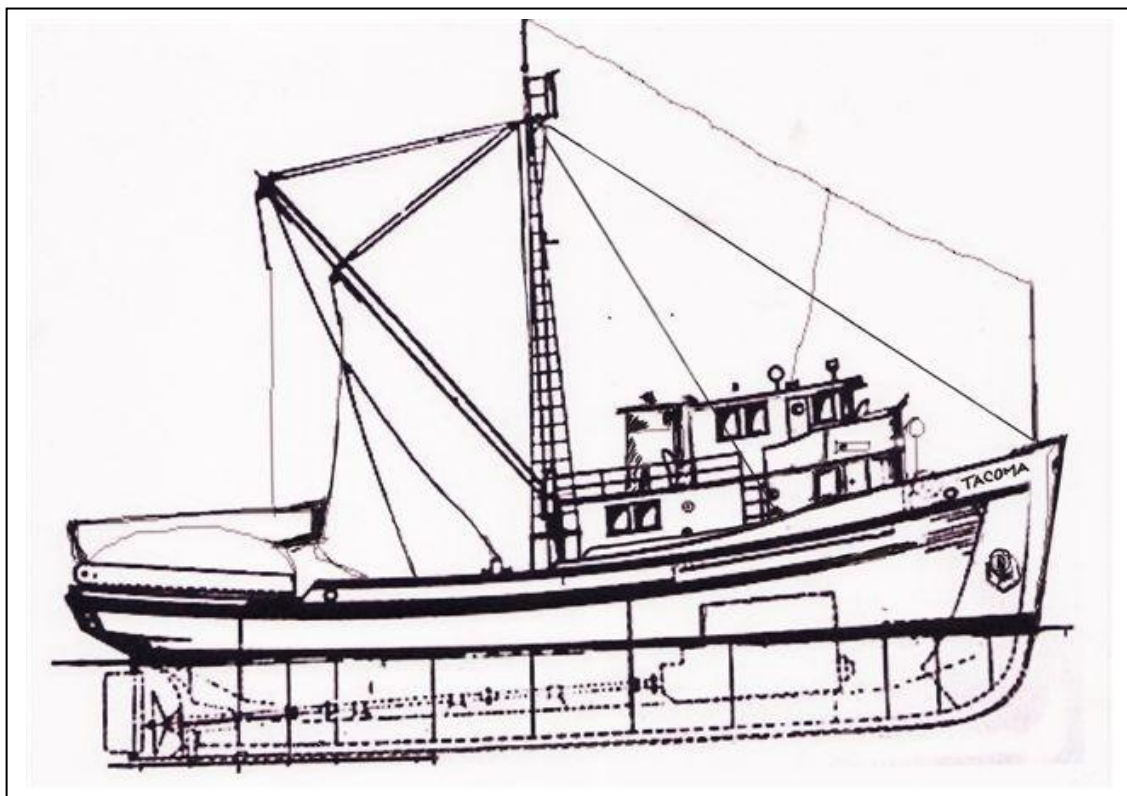
Communications:

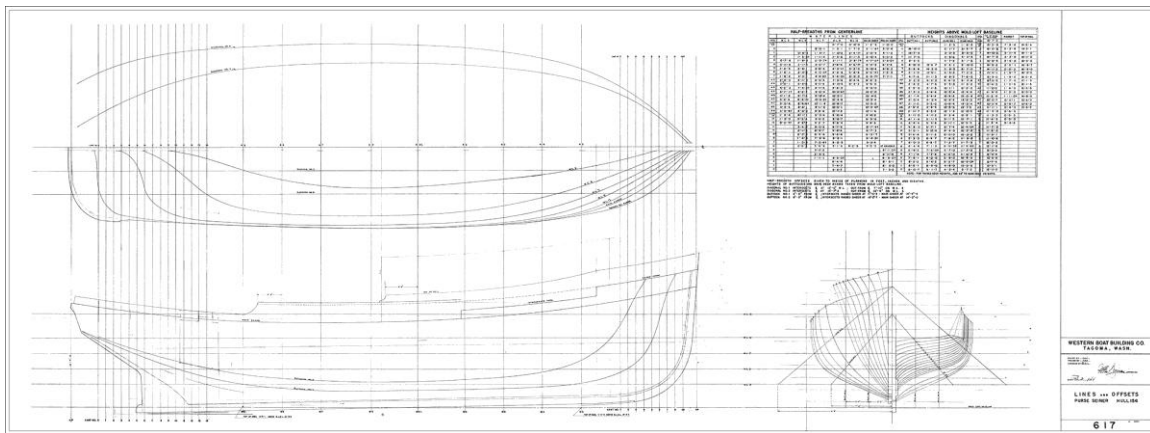
- HF, VHF, UHF radios

### Navigation:

- Global Positioning System and Plotter
- JRC Radar
- Echo Sounder

After the changeover, the *Tacoma* is now steered electrically.





## Section 3 Significance

*MFV TACOMA* is a current vessel on the Australian Registry of Ships.

- Tacoma's principal significance is that it was the vessel that established the tuna fishing industry in Southern Australian waters, based in Port Lincoln in South Australia. This has led directly to Port Lincoln becoming one of the largest and most economically important fishing ports in Australia.
- *MFV TACOMA* pioneered Tuna purse seining and live bait poling from 1952/5
- *MFV TACOMA* can be acquired in semi-operating condition, minus its prawn processing and freezing equipment; vessel has been kept in this configuration.
- *MFV TACOMA* is the only Tuna Clipper in the world or Australian museum collection which is kept in the water and used regularly.
- The changes of configuration and propulsion made to *MFV TACOMA* during its 50 years as a tuna and prawn fishing vessel, reflect the changing methods and needs of the fishing industry.
- *MFV TACOMA* has a significant history of its own, while also representing more widely the important theme of the Australian tuna and prawn industry.

### 3.1 History

(refer Plevin Story, March 2000)

The Haldane brothers' background included cuta and shark fishing out of Port Fairy. They were also aware of the large schools of salmon and tuna in deeper waters, but realized they needed a much larger and more versatile boat to establish themselves in this new venture. They considered the American tuna clipper to be the ideal craft. Through contact with boat building yards in the USA, who also fished for tuna on the Pacific coast, they formed a close association with Hervey Petrich in Washington, who had prepared designs for these vessels. See story

Building *TACOMA* was a massive undertaking for the three brothers and their families. A shed was made on the Moyne River bank at Port Fairy, logs from the Ottoway forest were felled and brought in, and largely by their own hands the hull took shape. Ingenuity and perseverance overcame any physical obstacles, but eventually they realized that they would run into financial difficulties and would require assistance to complete the project. It came in the form of loans from the South Australian Government, but with the condition that it would operate from a South Australian port and would be used 'to develop the fishing industry in purse seining'. The vessel was not to be used to compete with existing fisheries.

The Haldane's had done their homework well when they chose the design for *TACOMA*, and remained lifelong friends with the Petrich's in the USA. The name *TACOMA* comes from the city in Washington State, USA where the Petrich's firm, the Western Boatbuilding Company made wooden tuna clippers. They were surprised when they received the Haldane's requested plans for a clipper, including a cheque in payment for the advertised drawings. In fact Western Boatbuilding had not received any other orders for plans and did not have a set to sell when the order came. They had to make up a set from their full sized lofting for their own craft. The builders were so pleased that the Haldane's were interested in their design that they returned the cheque and the brothers got the plans for free. In return the Haldane's honoured the builders by naming the boat *TACOMA*.

After its launch in 1951 *TACOMA*'s maiden voyage was from Port Fairy to Port Lincoln in South Australia, via Adelaide, arriving in Port Lincoln on the morning of the 18<sup>th</sup> of JANUARY 1952. On board for the exodus to the west were the three Haldane brothers and their entire families, plus the Bellamy twins who had helped with the construction, and the cook; in all a total of nine adults, seven children, one watchdog and two cats. By the time they arrived in Port Lincoln there were six more aboard, the kittens born during the passage.



PHOTO 6  
HALDANE CHILDREN AND WIVES 1952



PHOTO 7  
*TACOMA* 1952 PORT LINCOLN

*TACOMA* began its fishing life in 1952 as a purse seiner, fishing for Southern Bluefin Tuna and other pelagic fish in the Great Australian Bight. By the end of the 1954 season this had proven a failure. With another loan from the South Australian Government, they changed over to tuna pole fishing with assistance from the American Jangaard brothers who came across from the USA to Port Lincoln later in 1956.

After trials on board *TACOMA*, with a crew which included Tom Playford, the South Australian Premier, as one of the tuna polers, the change of method proved a success with significant catches taken. Onshore the cannery was now able to process the haul, marking the beginning of a viable industry. The *TACOMA*, and other vessels which joined to establish a fleet, also used light aircraft as spotter planes to locate schools of tuna. A seasonal pattern became established and through into the 1960s they worked the East Coast Tuna fishery: Eden to Sydney from September to December and the Great Australian Bight from January to May.

A large vessel was needed to cope with the rugged sea conditions. This included the need to go out to the edge of the continental shelf at times, and the ability to stay out from port for long periods before landing the catch. *TACOMA* worked the two tuna seasons with individual fishing trips lasting up to 2 weeks at a time. The vessel had a crew of 8 men, including the Haldane brothers and the Bellamy twins.

A downturn in the tuna industry occurred in the late 1960s. The Haldane's were among the first to experiment with prawn industry and a refitted *TACOMA* then became a successful prawn trawler. Throughout its long life *TACOMA* was refitted three times, including the addition of refrigeration, double rigged booms for prawn trawling, a new engine, and in 1971 it was the first vessel in South Australia to undertake on board processing of prawns. In 2002 the vessel was finally retired from service, having been operated by two generations of the Haldane family over 50 years of continuous service.

*TACOMA* remains very well known among past and present people associated with the fishing industry around Australia, and early tuna boats like *TACOMA*. The young sons of those fishermen form the basis of two of Colin Thiele's children's books "Blue Fin" & "Magpie Island." both illustrated by Roger Haldane, William's second son. The South Australian Film Corporation produced the movie, "*Bluefin*" based on the novel.

PHOTO 8

*TACOMA* 1964

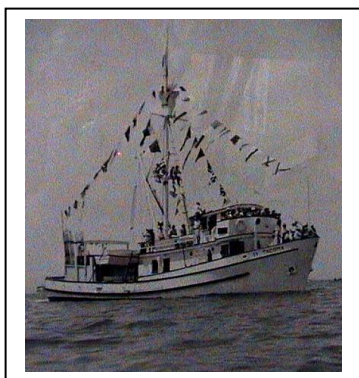


PHOTO 9

*TACOMA* 2007





### 3.2 Cultural significance

*MFV TACOMA* represents the tuna industry of Port Lincoln in particular, and Southern Australia in general. Post WW11, it has strong historical and social associations with many people, such as the older community of Port Fairy, VIC, the Petrich family in Tacoma Washington polers, cannery workers, captains, industry leaders, truck drivers, naval architects, tuna spotters, government scientists, management officials, and others who worked within the tuna and prawn industries. It was well known by the Southern Australian community. It is representative of an industry, which affected the lives of many people in remote communities, from Eden, NSW to Esperance, WA.

The vessel can be used to tell the story of the development and decline of Port Lincoln as a hub for commercial tuna catching and canning, as well as its expansion into tuna farming, fin fish, shell farming and tourism. Port Lincoln has the only tuna cannery in Australia processing tuna from as far a field as the western pacific. The John West cannery in Port Lincoln was the developer of the now universally successful 'Tuna Tempter' range of tinned tuna that we all enjoy for the tasty meal or quick snack.

The development and decline of the tuna industry is one of the most important in Southern Australians fishing history. From its work out of Eden and Port Lincoln *MFV TACOMA* can be used to bring out the importance of the Southern seas and coastlines to Australia's tuna industries. These associations represent an important aspect of Australia's maritime history, which has not been well represented in museums thus far. The tuna industries of the world have undergone dramatic changes since their early beginnings off the British and Mediterranean coasts as well as set net fisheries out of New York, Nova Scotia, Japan and throughout the Pacific west coast. Whole communities have grown and withered as tuna have moved through these areas. The city of San Diego is a good example of the fluctuating fortunes of communities that have sought to rely on this most pelagic of fishes. the world catch is estimated at neer 3 million tons

### 3.3 Design

*MFV TACOMA* was the first Australian wooden tuna clipper vessel built to American West Coast design. The yard that the design originated from was the Western Boatbuilding Co, in Tacoma, Washington, USA. The Petrich family, with founder Martin Petrich, were originally from the Dalmatian island of Hvar, off the Croatian coast, a link that would prove interesting in the development of the later Port Lincoln tuna industry.

Some 50 vessels followed, ranging from 55 to 75 feet, (see attached) with similar deckhouse configuration. All wooden clippers were later replaced by steel, and in one instance aluminium, boats that were faster and had a bigger carrying capacity. Steel hulls, power blocks, nylon netting and automatic poling machines were later to

revolutionise the catching of tuna, and in more recent years the development of tuna-farming or tuna feed lotting has changed the industry yet again. The catch peaked at 22000 t before being quoted at some 4500 t

*TACOMA* was unique in the construction of its steel bow, and in the formation of the stern shape and construction.

PHOTO 10 STERN



PHOTO 11 ROLLED STEEL BOW

### 3.4 Construction

The construction of *MFV TACOMA*, based on limited plans supplied by the Western Boat building Co, underwent a series of adaptations from the American construction methods; in particular the bow and stern (see Attachment 6 photos).

Some sections were changed during the correspondence with the Hervey Petrich. The use of Australian hardwoods in the underwater sections and other structural elements of the boat, differed from the American soft wood construction. The hull planking topsides of Oregon and the under-water sections in Jarrah was in part due more to a shortage of available timbers than a deliberate choice of material. Post war shortages of all supplies of material had an influence on choices, including steel shortages caused by a strike in the coal and steel industries in 1946, all of which affected finance and timing of construction.

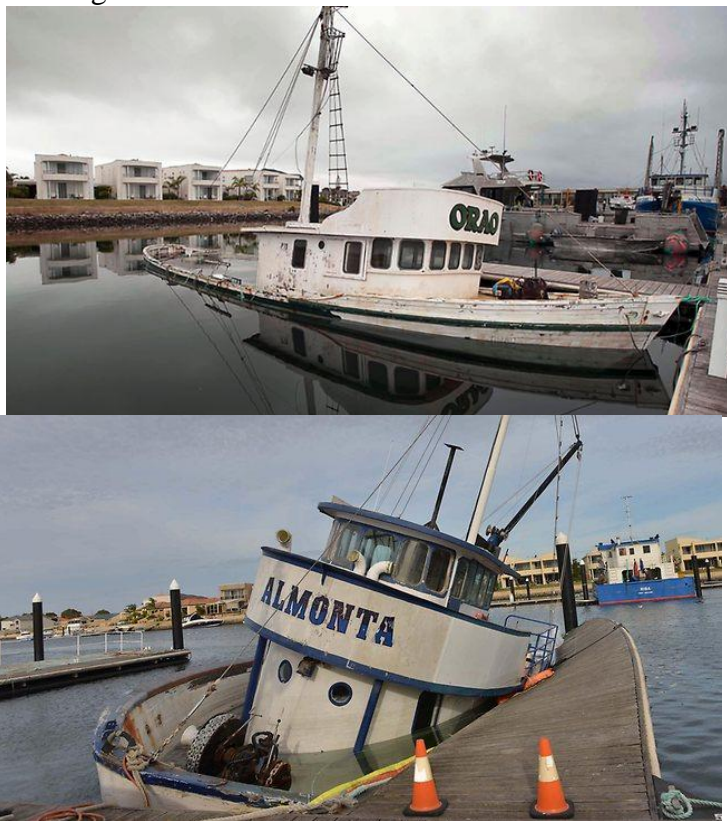
Correspondence between William Haldane and Hervey Pertich, which spans some 25 years, includes the building phase as well as the fishing operations phase, and give a good insight into the challenges in techniques and design which the builders faced. See mmapss project The description includes a detailed list of the timbers and fastenings used in construction. These are incorporated in the detailed specifications in Section 2. The methods and details of the construction are quite typical of the evolution of wooden boat construction in general. The builders had previously built smaller 40ft wooded Shark

boats, and the father of the three brothers was a shipwright/ship carpenter emigrating from the shipyards of Scotland's Clyde River.

The craft is carvel planked. This is laid up to a combination of grown, steam bent or sawn assembled frames, floors, stringers, backbone and knees, all with relatively heavy scantlings that suit the conditions in the Southern Ocean, Bass Straight and Great Australian Bight. It is a practical method overall, and produced a craft soundly based on elements that have been tested and worked in the past, but at the same time introducing design elements and construction techniques that had been tested on their previous two boats, for example the planking and corking technology of closed joints.

## Section 4 Comparative Vessels

*MFV TACOMA* is the only example of a 1950 wooden tuna clipper that is floating and within a museum collection in Australia. A number of tuna clippers that were converted from other uses, and later wooden vessels, are still fishing in the South East Trawl Fishery and Tuna Farm Industries. In private hands the poler *Orio* has been laid up in Porter Bay, Port Lincoln awaiting a new life as a private pleasure vessel. She has been stripped of engine and equipment and has suffered the fate of a recent sinking at her moorings.



From the 1960s', vessels in the 75ft to 90 ft range were constructed in timber principally in the Port Adelaide yard of, initially, Porter and Sons and later Kali (Tony Franov). The later vessels feature more pronounced stems. Individual vessels were built from Sydney

to Port Adelaide until the mid 1970's when steel construction and the loss of the Commonwealth Ships Subsidy finally saw the end of wooden construction. The last wooden tuna clippers could form part of future research to plot the development of the tuna clipper through time. The fate of the large fleet of vessels that participated in the tuna industry is an unstudied area. As an example of the dangers to vessels operating in Southern waters, a list of the vessels that participated in the 1963 Port Lincoln tuna season will be some guide to the vessels' fates.

**List 1 Vessel List 1963 Season Port Lincoln**

ESTELLE STAR	burnt, SA
HUON	wrecked Gulf of Carpenteria, NT
ST MICHELE	wrecked South Neptune Is, SA
SMADA	Sank Port Lincoln, SA in 1946 lost 7 lives SA
CAPE BARON	Sold to NZ, private Vanuatu dive boat
CAPE BYRON	sank Rocky Island, SA
MARY ANN SIMS	Spencers Gulf, SA, Active
BRONZEWING	Cairns, QLD, Dive Vessel
BINTANG TERANG	wrecked Point Weyland, SA
HERMAY	wrecked Gulf Carpentaria, NT
KALI	Lincoln Cove Marina SA
DEGEI	wrecked Donnington Rock, SA
MAMEENA	abandoned Ceduna, SA
CHALLENGE	burnt, SA
LISMORE STAR	wrecked, SA
LOCK LOMOND	burnt, SA
FAVORTIE	wrecked Lord Howe Is
KAN AGU	unknown
ELKALTA	wrecked Memory Cove, SA
CATRIONA B	unknown
TWO FREDDIES	Burnt Farm Beach SA
KOLEGA	unknown

In total, some 170 vessels are known to have participated in the Southern Bluefin fishery from the early 1940's to 2007. A list of these vessels could provide an area for research.

**Sister Ships**

Tacoma carries the hull number 156 from the Washington yard. This vessel was based on the Stanford of 81 ft the three additional feet comes from Tacomas steel bow.

A vessel of similar design, and her most like sister ship, (see PHOTOS 1&2) is *WESTERN EXPLORER*. This vessel undertook a 6,000 mile journey in 1938 from Tacoma through the Panama Canal to Nova Scotia. The aim of the journey was to demonstrate to the East Coast fishermen the new emerging technologies of the West Coast. 20,000 people were at the dock to see her off. *WESTERN EXPLORER* was taken across the Atlantic to England and participated in the Dunkirk evacuation. Her last known port was Jamaica. And was reported to have been wrecked off the California coast in 1956

Another similar vessel, the *WESTERN FLYER*, was featured in the book, “*The Log from the Sea of Cortez*”, by John Steinbeck. Steinbeck is best known as the author of “*The Grapes of Wrath*” which gained him the Nobel Prize for Literature in 1962. He was also an enthusiastic marine biologist. He studied marine biology at Stanford, though he left without graduating. In 1940 Steinbeck and Ricketts hired a Monterey fishing boat, *WESTERN FLYER*, and cruised through the Gulf of California (AKA the Sea of Cortez), an event which subsequently resulted in his book. the Western flyer is destined to be a restaurant display .



## Section 5 Interpretation and Use

### 5.1 Analysis of display options

#### **Major brief**

*The display of the hull should articulate the magnitude of the boat building past of the Tacoma story, the construction town of Port Fairy, the shed and the launching; a period of some 7 years, indicating:-*

- Timbers used
- Tools and techniques
- Plans
- Expertise
- Politic, finance, life at the light house on Griffin island
- The coming to Port Lincoln, family on board and housing
- Wives and children, plus the Bellamy twins
- The tuna industry in ten-year periods with sub-sections, eg. cannery workers, ship builders, researchers, truck drivers, radio operators, wives and girlfriends, children, clipper owners, hotels, tuna spotters, etc see mmap;s application 2012

#### **Methods of display.**

Six principal options need to be considered. These options have been developed under the following premise:-

that the item to be displayed comprise two main sections

- 1) the hull and onboard artefacts
- 2) a collection of off vessel artefacts and material that would require collating.

**In water, fully operational with passenger carrying option (display of artefacts and broader interpretation in out and out of water, dry housing as a future adjunct)**

Option 5 was adopted for the following reasons

- Vessel will be fully manned with volunteers
- Vessel will form a moving floating display
- Opportunity for film making land line 2011/13 ABC
- Opportunity for special charters, events tuna trip Australian wooden boat festival
- Opportunity for added sponsorship and promotion
- Educational benefits
- Creation of off-water display area to promote and interpret the whole tuna industry
- Creation of a city icon
- Creation of a tourist precinct
- Creation of a field for academic study using the resources assembled in and off water faculties.

### ***5.2 Fitout and interpretation of the Vessel & Artefacts***

It is recommended that *MFV TACOMA* remain on display in the water. It should be fitted out with equipment and gear appropriate to its eventual configuration, as a Tuna Poling vessel used in the Southern Bluefin Tuna industry in the 1950's. It should be open at various times as appropriate, for special events or purposes.

The history of the vessel and its changing fishing from Tuna, Salmon through to Prawns should be explored in interpretative programs and products, which can be centred on the vessel - events, activities, publications, and demonstrations. The current recommendation is that the interpretation on board should reflect the Tuna industry of the early period of *MFV TACOMA*'s life. This will provide a basis to explore other related areas.

Further interpretation can be provided by interactive facilities potentially positioned alongside the vessel. These can explore the tuna industry incorporating film, photographs and oral history. Volunteer guide programs on the vessel can augment all programs.

If practical, it is recommended that the *MFV TACOMA* be berthed next to other working vessels involved in fishing industries, allowing the interpretation to be conducted in conjunction with related vessels. THE TACOMA PRESERVATION SOCIETY are working towards a berth alongside the fishermans merorial see doc

There are focus areas which can be directly applied to *MFV TACOMA*, and this should be the subject of future interpretation and research. (see Appendix C)

### ***5.3 Making Links between the Vessel and the Shore***

Exhibitions linking *MFV TACOMA* with an onshore facility needs to be developed, since tuna fishing was one of South Australia's most dynamic maritime industries and crucial to the economic growth of South Australia. Exhibitions rich in objects and images can expand the stories of poling to ship-living away from the home port for up to 5 months, life on board, the development of the tuna industry from canning to sashimi, and the modifications to vessels which were brought about by changing conditions and techniques - all of which will already be outlined in the vessel's interpretation. The Axel Stenross Museum has in place the beginnings of a collection that could be expanded and housed within the slipway precinct.

'Old time' poling experiences could be provided, with activities such as spotting, chumming and the long night watch included. The housing of a spotter plane may add to the experience of spotting for tuna over the expanse of the Southern Ocean.

### ***5.4 Public programs***

*MFV TACOMA* can be used for a variety of general visitor programs with Tuna fishing activities alongside at the berthing location, or on board for special programs as resources permit.

For example, an on board activity might include going up the mast to the crows nest, or sighting fish from an aircraft on display.

### 5.5 Education resources

*MFV TACOMA* is also a valuable education resource tied to education curricula by comparative analysis. Appendix B details curriculum areas where *MFV TACOMA* can directly relate to the specific education program. Further research is recommended in this area to integrate potential areas of study through the educational systems of, for instance, Flinders University, Adelaide University, Spencer TAFE Institute and the secondary schools sector. Special attention should be given to the Kirton Point Primary School because of its use of *TACOMA* as its school emblem.

### 5.6 Outreach and Internet

The regular monthly operation of *MFV TACOMA* is necessary for maintenance and to inhibit marine growth on the hull, and also provides an opportunity to increase the profile of *MFV TACOMA*, as well as promoting awareness of the tuna industry, and the onshore display generally on the harbour. The potential to associate operations on the harbour with maritime archaeology programs subject to operational procedures and guidelines, may also be explored through institutions such as the Lincoln Marine Science Centre and Flinders University.

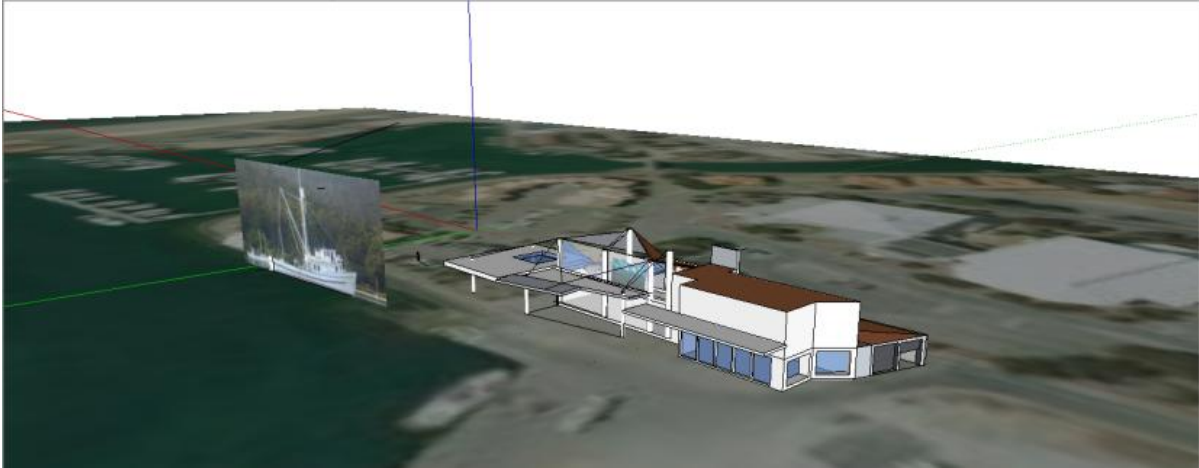
It would be possible to install a travelling exhibition and take *MFV TACOMA* on a tour of old tuna ports of Eden, its birthplace of Port Fairy, and possibly Sydney, its farthest East fishing port. This would allow increased publicity and exposure for the ANMM. The trip could take on a number of different aspects, such as visits to maritime museums at the various locations. Alternatively, the group could develop, in conjunction with the ANMM, a travelling exhibition on the history of tuna in Australia. EDEN STRIKE A dangerous occupation, fishermen have been lost when hauled overboard by large tuna and entire crews of vessels have vanished in poor weather.

This exhibition examines the evolution of methods and equipment associated with tuna pole fishing, and pays tribute to the fishermen who worked in the physically, financially and emotionally demanding industry of tuna poling.

‘Strike’ is open from 13 February – 11 August at the Eden Killer Whale Museum. A large film archive exists from the early 1950 to today’s tuna farming, with the National Geographic Society and both Thalassa and Japanese television channels featuring individual productions of the tuna story. Interest also lies in Colin Thiele’s children’s books “Blue Fin”, There is also the South Australian Film Corporation’s production “*Bluefin*”. . This format could also look at the historical role of the Japanese in the tuna industry across southern oceans from Cape Town, South Africa to Hobart, Australia. The telling of the Japanese story would appeal to the Japanese tourists visiting the ANMM (14% of international visitors to Australia are from Japan). The Japanese were closely involved in the industry, playing a crucial role in development of long-lining and the tuna sashimi (raw fish) market in Japan. Further programmes could be developed regarding the start of the tuna farming industry.

The Port Lincoln area, through the Eyre Regional Development Board, has a well established seafood trail that includes a charter vessel specialising in tuna farm visits and swimming with the tuna. The Port of Lincoln and the Lincoln Cove Marina are one of Australia’s most active fishing ports. The daily operations of the tuna, mussel and king

fish farm vessels, coupled with the unloading of some 40,000 tons of pilchards, 9,000 ton of tuna, 2,000 tons of prawns, and a mix of trawl fish and long-line rock lobster and shark, makes the two port precincts extremely active. All these area have free public access. This background of activity will provide an idea setting for the placement of the *MFV TACOMA* and its associated artefacts, eventually bringing together the natural and man-made activities of a vibrant, working port; it is a continually unfolding story of fish harvesting 24 hours per day.



### ***5.7 Tuna Fishing***

*TACOMA* has the capacity to be used as an active fishing vessel to harvest southern Bluefin tuna and some Australian salmon once a full refit has been completed to reinstate the vessel as an active fishing vessel. The concept of an historic vessel fully restored to fulfill its original role could be very appealing to add to the visitor attraction. Actual fishing trips during the months of March in local waters to pole and visit the outlying island have great appeal and provide high returns to the vessel. This actual operation returns the vessel to a real vessel not just a static museum piece not to be touched.

## Section 6    **Timeline**

### *6.1 Vessel ownership, use, significant events*

The general history of *MFV TACOMA* is documented, but a full research program, as recommended in this VMP, should be undertaken to flesh it out. Following is a basic chronology.

- 1944-51 *MFV TACOMA* built by Haldane brothers in Port Fairy, VIC.
- 1952-54 Vessel purse-seined for tuna and salmon South Australian waters, as number 84
- 1956-59 Tuna poled live bait, South Australian waters
- 1959-68 Tuna live bait, eastern Great Australian Bight and east coast Australia, as Number L01. Keith Bellamy lost (drowned) while fishing.
- 1967 Prawn experiments
- 1968-2003 Prawn trawler, double-rigged
- 2007 Haldane Family Ownership

### *6.2 Chronology of changes*

- 1955 aft turn table removed and aft bait tanks fitted for live bait and racks
- 1957 fish hold modified to six (6) steel refrigeration tanks
- 1965 aft deck tanks removed, stern poling platform fitted.
- 1968s trawl booms fitted, and beam trawl used
- 1969 twin otter trawl fitted
- 1971 Atlas engine replaced with Grenna, onboard refrigeration and plate freezer, prawn sorting hopper and grader, variable pitch
- 1976 freezer
- 1980 steel keel shoe fitted
- mast replaced
- PRESEVATION .....2009

### *Summary*

- 1951 Purse seine, tuna & salmon
- 1956 Tuna poling, ice
- 1966 Tuna poling, refrigeration
- 1969 Prawn trawl, double rigged
- 1971 Prawn trawl, double rigged, freezer



## Section 7 Preservation Aims and Objectives

### *7.1 Preservation approach*

The general aim of the preservation program is to maintain the condition and configuration of *MFV TACOMA*, representing the earlier period of operation in the tuna industry. Any replacement of material should be done with material in-kind to retain historic integrity and the look of a working tuna pole vessel. Additional preservation work, like the fibre glassing of the timber deck and the use of epoxy resins, should be assessed in the context of the long-term preservation of the vessel.

### *7.2 Maintenance approach*

It is recommended that a maintenance officer/s be appointed by the management group, and a Maintenance Log be maintained by the appointed officer/s.

A Maintenance Checklist should be developed in conjunction with the vessels' previous skipper Robin Haldane and engineer Andrew Haldane, to ensure a thorough and systematic approach to maintenance.

If any major changes need to be undertaken it is recommended that a photographic record be kept of these changes. Any changes should also be recorded on relevant files, which are accessible to the personnel involved in the management of the vessel.

*MFV TACOMA* should be manned as if in full operating condition. Should be cleaned internally on a regular basis. Apart from the aesthetic importance of cleaning, if dirt is not removed it is likely to absorb moisture and discolour paint over time. As *MFV TACOMA* is a relatively large vessel, it is recommended that for cleaning processes, the job is segmented and approached in a systematic fashion, perhaps on a rotating basis. Prevention of dust and foreign bodies is also recommended. When work is undertaken on adjoining vessels dust covers and screens should be used where necessary.

Water temperatures within the Lincoln Cove Marina are seasonal. Fluctuating temperatures should be noted and marine growth monitored. Any prolonged wet or dry seasons should also be monitored and treated accordingly. The berthing of the vessel should be changed on a regular basis to reorientate the hull. This will avoid sun exposure on a particular side.

### ***7.3 Fit out plan for onboard access - related material***

**The following items have been installed for access to the vessel:**

- Boarding ladder
- Access to upper deck
- Visual display
- Sun canopy
- Crows nest - the vessel's original crows nest should be installed to add to its visual entity and if possible to be used as a viewing platform.
- Safety equipment to comply with CLASS 1E 2B 3B (inner harbour operational limits) as a minimum
- Racks - galvanised steel racks fitted to the aft section of the vessel to illustrate the poling positions in which crew would have fished

Photo 15 Tacoma poling from outboard racks 1956



## Section 8    **Inventory report on condition**

### ***8.1 Hull***

### ***8.2 Superstructure***

The superstructure is in good condition and is well protected. The whole of the deckhouse has been stripped of all existing paints and epoxyed with a finish coat.. The interiors of the deckhouse and pilothouse are as original and would only need restoration by the removal of more modern fixtures.

Care should be taken not to revert the feel of the vessel back to new, but rather to represent the texture of the living quarters as an active fishing vessel.

The pilothouse will require additional research and detail to convert the interior back to its tuna poling condition. The bridge carried a binnacle that is currently in family possession and care needs to be taken to restore it into the bridge. The external steering wheel is painted and could be restored to its original varnished treatment.

### ***8.3 Rig***

The rig is in good condition after a full refit of crows nest

### ***8.4 Machinery and engineering***

Main engine in full running condition	10,000 hours	good
Auxiliary engine in full running condition with	10,000 hours	good
Air compressor	good	restored
Winch	good	
Anchor winch	good	
Rudder gear	fair	
Refrigeration unit	new	
Tools		
Fuel tanks	fair:	rusting on top
Electrical	fair	
Water tank	good	
Propeller	good	
Spare parts	good	
Manuals	good	
Batteries	new	

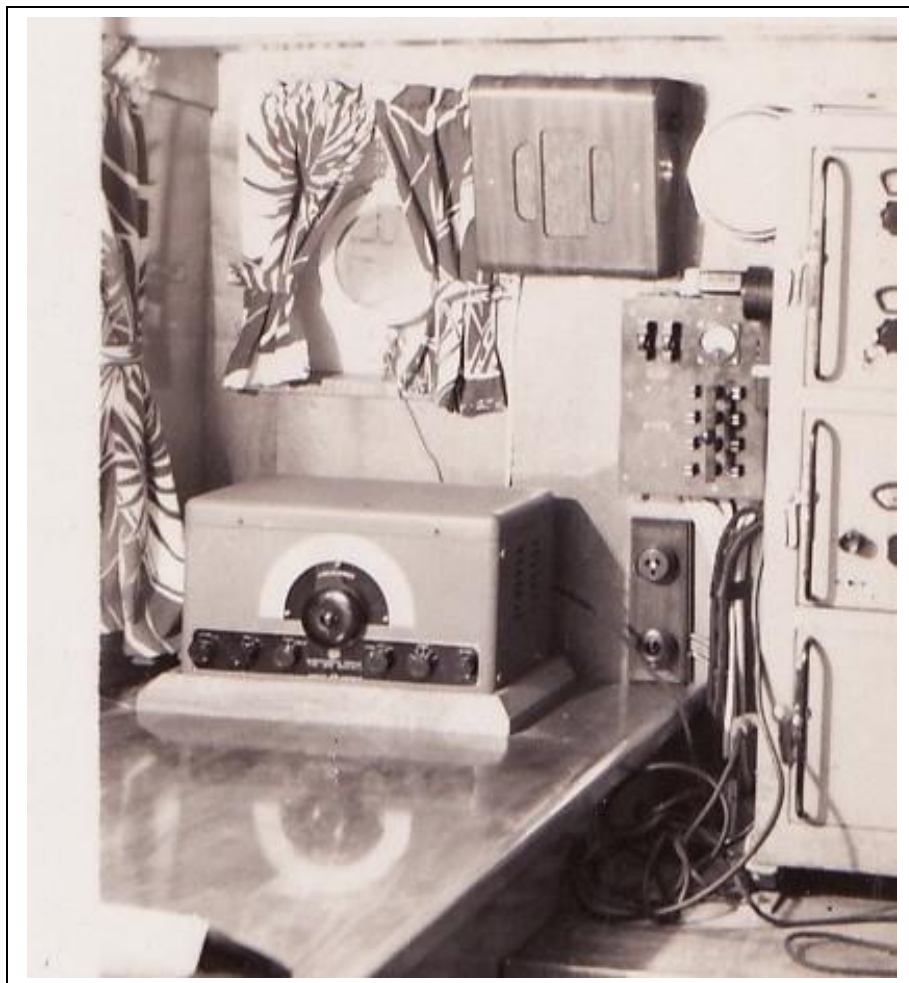
### ***8.5 Electronics***

The original echo sounder FITTED

AWA transmitter radio was destroyed in the Wangary bushfires 2005

A collection of radios is installed in the pilothouse.

PHOTO 16  
RADIO ROOM



## **Section 9 Budget**

### ***9.1 Vessel readiness to operate***

To prepare the vessel to an operating readiness, \$200000 has been spent to date, 2013. This includes painting, cleaning and associated costs, electricals, fire fighting, fenders, safety gear survey and re-installment of the crow's nest.

### ***9.2 Fit out for passenger readiness***

Additional costs to bring the vessel to full passenger readiness .

### ***9.3 operating costs***

Ongoing annual operating costs are estimated at \$39,000. Income would be generated through public use of the vessel, which should defray annual operating costs.

### ***9.4 funding***

Funds will be raised primarily through public donations, sponsorships and memberships. All monies will be channelled through a Public Fund, and the Tacoma Preservation Society is listed in the Cultural Gifts Register as a Donor Gift Recipient, which satisfies its not-for-profit objectives.

## **Section 10 Maintenance and Fitout Issues**

### ***10.1 Schedule of maintenance***

A schedule of maintenance will be developed by the Society's elected Officers, in consultation with the vessels' previous skipper Robin Haldane and engineer Andrew Haldane, to ensure a thorough and systematic approach to maintenance.

This schedule will include regular inspections and tasks.

See Appendix D for sample.

### ***10.2 Fitout issues***

The vessel's current condition requires the following work to be carried out, to meet the desired objective of restoring it to a 1950's style tuna poling vessel:

- Remove all non-required items for archiving or disposal depending on their importance
- Remove all surplus refrigeration pipe work and identify through hull fittings for removal

## Section 11 Operational, Environmental and Safety Requirements

### *11.1 Operational procedures in brief*

	<b><i>MFV TACOMA</i></b> 1951, AUSTRALIAN TUNA CLIPPER
Operational Use	<ul style="list-style-type: none"> <li>• Available for selected events - Blessing of the Fleet, demonstration fishing etc</li> <li>• Maintenance operation as per program</li> <li>• Available for selected film and still photography</li> <li>• It is proposed to utilise the vessel for demonstrations of tuna live bait poling techniques.</li> </ul>
Area of Operations	To be determined by survey
Crew	<p>Maintenance activities: minimum 4 (Captain, Engineer, 2 deckhands)</p> <p>All crew to be trained and/or qualified re survey &amp; safety requirements.</p>
Readiness	

### *11.2 Survey restrictions and safety equipment*

Minimum survey approval sought for passenger carrying will be Class 1E, that is operating in smooth waters only. Survey requirements for this category are:

#### ***Maximum number on Board***

49 persons, including 4 crew in a passenger carrying operation.

#### ***Area of Operation***

The waters West (landwards) of an imaginary line from Point Boston to Donnington Rock.



### ***Lifesaving Equipment***

This will be determined by survey requirements.

In the interim, standard safety equipment for a private vessel of this configuration will be maintained. This will include:

- 4 lifebuoys
- 1 lifebuoy with light – night time operation only
- suitable lifejackets for all persons on board
- parachute rockets, signals
- red hand flares
- 1 hand held orange smoke signal

**As a Top Priority, an access ladder to board vessel from the sea will be provided.**

### ***Fire Fighting Equipment***

- 2 fire buckets with lanyard
- 1 x 2.5 kg dry powder extinguisher
- 1 x 9 litre foam extinguisher
- fire fighting system

**A Fire Fighting Plan will be developed as a High Priority, with all crew to be trained in procedures.**

### ***11.3 Equipment Maintenance***

If, during the course of carrying out normal equipment checks, any malfunction or deficiency is observed, it is to be noted in relevant ship's logs and equipment check lists. In addition the date and manner of rectification is also to be recorded in these areas.

### ***11.4 Bilge Water and other waste***

The disposal of any waste material must be in complete accordance with the current MARPOL regulations. Any build up of bilge water or waste oils etc. should be pumped ashore either to storage drums or to a recognised Collection Contractor's tanker. Solid waste, food scraps etc are to be placed in garbage receptacles ashore for removal by the usual contractors.

### ***11.5 Bunkering***

It is proposed that the following Standard Operating Procedures apply:

- Only sufficient fuel should be bunkered at any one time to allow a planned operation to be carried out. Bunkering will normally be carried out at Lincoln Cove Marina.
- Every effort must be made to contain any possible spill

- Oil absorbent material must be available to clean up small spills on deck.
- Responsible employee to be in charge.
- Danger/No Smoking sign displayed, fire fighting equipment ready.
- Check bunker tank soundings before starting. Bunkering plan to be determined.
- Check bunkering quantity and the proposed bunkering rate.
- Check that all necessary valves are in their correct positions.
- Communication between bunkering stations, Deck and Engine Room, to be established.
- Check air escapes/vents.
- Check to ensure bunkering hose is supported if using barge.
- Note starting time.
- Sound tanks regularly during bunkering
- Tanks to be filled so as to prevent list.
- Tanks not to be filled above 95% max.
- As far as possible, avoid mixing new bunkers with old bunkers.
- Record completion time.
- Take soundings on completion of bunkering.
- Record soundings and quantities in Vessel Log Book.
- Do not close valves until bunkering is finished and hoses disconnected.

### ***11.6 Risk Management Incident reporting***

Development of a procedure briefing is required

#### ***General***

It is the aim to always operate the vessel in a safe and responsible manner. However, it is recognised that despite the best planning and care, accidents may happen. If the vessel is involved in, or observes, any incident such as, collision, fire, grounding etc, these must be reported as soon as possible to the authorities as listed below.

#### ***Local Authorities***

Any incident of pollution, accident or fire should be reported as soon as possible as follows:

- On Boston bay, incidents may be reported immediately to – VHF Ch. 16 Tumby Bay
- Incidents may also be reported to Police if no contact can be established with other authorities.
- Any incident of pollution, accidental or otherwise, must be reported to the Environmental Protection Agency

If, at any time, the vessel is to be operated outside the state of South Australia, contact numbers or for the local authority (or radio calls signs where appropriate) are to be determined before any such operation takes place.

All major oil spills and shipping emergencies should also be reported to Australian Maritime Safety Authority (AMSA) - 1800 641 792.

## **Appendix A – Bibliography, References and Relevant Files**

*ABC regional radio*  
*AFMA, Tuna Fishery*  
*ANMM, Management Plan - Floating Vessels, 24 September 2003*  
*Australian fishing vessels* *G Kerr*  
*Axel Stenross Museum*  
*Book, "Bluefin"* *Colin Thiele*  
*Conservation Society*  
*CSIRO Report, Tuna Fishery*  
*Documentary, Tuna Cowboys*  
*Down to the Sea* *Marr*  
*Family press cuttings*  
*Film "Bluefin", South Australian Film Corporation*  
*Fins and Sails* *S Evans*  
*For They Were Fishers* *E Wallis CARTER*  
*International Commission for the Conservation of Southern Blue Fin Tuna*  
*M Puglisi, Ulladulla, NSW*  
*Port Lincoln Times*  
*Research material from Eden Killer Whales*  
*The Eden Maritime Museum*  
*The families Wilson, Gibson, Scott, Tidwell, Gordon and Allen*  
*The Humane Society*  
*The Tacoma and the Haldane Family* *J Pleven*  
*Wooden Fishing Boats* *Gifford Chapman*  
*WWF*

## **Appendix B - Historic Material and Research Documentation**

A good basis for interpretation of the *MFV TACOMA* already exists and there are avenues established for further development.

Copies of a number of other official documents are also held on the file and contain the basic information of the vessel:

### ***Log***

- available during tuna operations daily

### ***Personal Account***

- Oral History

### ***Photographs***

- Brodie collection, 16 mm dvd

### ***Props for outfitting***

- a large collection of family memorabilia

### ***Further contacts***

- Family members and the surviving twin, Jack Bellamy
- Former crew poling, *Jack* Bellamy is a further source of information, images, and also equipment which the Bellamy family are willing to donate to the project,

### ***Related material***

- A large number of Port Lincoln early tuna families still reside in the city. The research avenues indicated in the acquisition documentation for the collection should be pursued, in particular the Japanese government's Tuna Policy and its effect on the Australian Tuna Commission For The Conservation Of Southern Bluefin.

## **Appendix C – Focus Areas Recommendations for Research**

### ***Migrants and refugees***

Immigration is a central part of Australia's history and most migrants, from the First Fleet to recent refugee arrivals, have come via the sea.

Our collection on immigration history covers chronologically the earliest years of European arrival and settlement from 1788 to the present day. The aim of the collection in this Focus Area is to represent the experiences and stories of those who travelled to Australia voluntarily, involuntarily, and as assisted or unassisted migrants under the many schemes which have existed.

The broad categories range from convicts, free and assisted migrants, indentured workers and travellers, to skilled migrants, displaced persons and refugees. The southern blue fin tuna industry work force has been made up of waves of immigrants after WW11 and the industry today is dominated by the later arrival of the Croatian group of fishermen, principally from the Dalmatian island of Kali.

***Areas to be developed could include*** the development of the nation and the social development of the differing ethnic groups into the varying fishing industries in South Australia eg. Finnish, Yugoslav, Italian, Greek, Croatian, etc.

### ***Resource management***

The Bluefin Tuna industry's pattern of exploration, and the development of tuna towns, forms an important part of the relationship between people and a wild, exploited, natural resource. From the east coast of Australia to Esperance in the west, the interaction between the two fisheries of Japan and Australia, and the issue of resource management, can be articulated

### ***Environment and Industry***

Environment and industry covers the interrelationship of industries and the environment. Themes include Port Lincoln whaling, sealing, fishing and more recent industries such as aquaculture. Another is the relationship with Muroto city in Kochi prefecture, Japan, and its relationship with fishing resources.

### ***The development of fishing fleets, fish markets and fishing communities.***

The Australian tuna fleet was one of the large scale fishing fleets developed in Australia after WW11. It started in the early 1940's and continued for the next half century. This fleet operated in southern waters and developed with a multicultural workforce. Tuna vessels were designed and built by a variety of designers and boat builders from Port Lincoln, Port Adelaide, Portland, Port Fairy, Melbourne, Eden and Sydney. Tuna fleets changed over time from small, carvel built boats to converted rock lobster boats, Sydney ferries and South Sea Island traders. Along with the tuna fleet, a remarkable community evolved, making tuna possibly Australia's first large scale multicultural industry. This highly mobile community often moved across southern Australia from Eden, NSW to Port Lincoln, SA. The wives were often employed as cannery workers while husbands went poling fish, spotting or truck driving, transporting fish from outports of Streaky Bay on the west coast of SA and Esperance, WA.



***Factors affecting fish stocks, including over-fishing, illegal fishing and management of fisheries in Australian waters.***

In the early years of the tuna industry there was no control over tuna resources as they were harvested. With no direct ownership of the resources they were exploiting, the boats moved from one resource base to another as fish were depleted from the east coast to further into the Great Australian Bight. Tuna fishermen were often of middle age and had worked as fishermen in the Bass Strait or east coast trawl fisheries. The decline of the Southern shark fisheries was a trigger for many of the larger shark vessels to head west in search of a fortune.

One feature of the tuna fishery was its Aldrin production system of harvest. Boats could remain empty for weeks then fill up in an afternoon. Old fishermen describe the tuna fishing as *real fishing*. From the first cry from the crow's nest of a school to starboard, the quickening of engines signalled the start of the race to the fish. Waders and helmets were donned and squids and live bait were prepared to begin the first strike and the thumping of blooded fish on the deck. Exhaustion at day's end with a full hold of fish, boat low in the waters turning for home was a good outcome. A radio call "VH5BA Tacoma all ok ETA 8.30 AM in the morning from Rocky Island OVER". Not the regular boredom of rock lobster potting or the monotony of long hours of trawling.

The historic catch rates of tuna can show the decline of tuna over time. With the two major Bluefin catching countries of Australia and Japan, an interaction between the two nations developed to form the 'Commission on Tuna'. It is also possible to link government legislation to the decline of the industry and government efforts to manage and control the natural resource. The relationship and development of tuna farming and the Japanese market can be placed within this context.

In the context of environment and industry *MFV TACOMA* can help to represent the development of the fisheries management industry. Associated with the *MFV TACOMA*, Bill Haldane was a principal architect in the development of a limited entry State fishery. The techniques and practices of the industry should also be researched, from Japanese overseas development programs into tuna farming, to relevant work by the CSIRO, Tasmanian division and the Lincoln Marine Science Centre. The involvement of the Japanese in the Australian Tuna industry should be researched as an important element of the story.

***The history of environmental lobby groups and of Government policy on maritime industries.***

The relationship between catch rates and legislation can also be developed and examined over time. For example, when government legislation was introduced, what was the effect of this legislation on TUNA catching methods and techniques? Different types of fishing, e.g. prawns, southeast trawl fish and pacific tuna farming in Spain and Mexico can also be examined and placed within the context of the TUNA industry and the decline of world tuna stocks.

### ***Recreation. Sector***

With the hope for recovery in the Southern blue fin stocks, the opportunity for the general public the access the tuna resource is increasing, as an example the support of Port Lincoln local fishing tournaments and fishing charter companies are emerging to make use of the tourism potential of wild catching tuna. Such large fish have wide appeal in magazines, photos and weekly spreads in regional newspapers in the fishing sectors. There is a need for more and better information. These new harvesters of the resource must deal with the complexities of managing a pelagic stock that ranges from Cape Town to New Zealand, and that spawns in the Java Sea. The developing of resources that connect with this growing group of recreational fishers will assist in telling the story of tuna.

### ***The family story***

The Haldane Family -this could touch on what the Haldane's did, which should serve as top level example of Australian pluck, perseverance and hard work. It is an effort deserving top marks and serves as an example even today as to what can be achieved from small beginnings by farsightedness and perseverance.

## Appendix D - Maintenance Checklist

*This check list will be prepared in consultation with the Haldane family  
A sample follows:*

<b>Daily</b>	<ul style="list-style-type: none"> <li>- inspect hull and Engine Room.</li> <li>- inspect vessel's trim and attitude.</li> <li>- inspect for any water ingress.</li> <li>- inspect all lines, fenders and fairleads.</li> <li>- inspect all electrical leads, connections and pumps.</li> <li>- Carry out salt water wash down of decks</li> </ul>
<b>Weekly</b>	<ul style="list-style-type: none"> <li>- Run engines and charge batteries.</li> <li>- Check batteries charge and electronics.</li> <li>- Run up all machinery: mechanical and electrical, check for defects</li> </ul>
<b>Monthly</b>	<ul style="list-style-type: none"> <li>- Operate vessel</li> <li>- Run up all machinery: mechanical and electrical, check for defects</li> <li>- Inspect and patch painting on deck and structure as required</li> <li>- Check and test safety gear</li> </ul>
<b>Six monthly</b>	<ul style="list-style-type: none"> <li>- In water inspection of hull</li> <li>- DIVE underwater surface area</li> </ul>
<b>Yearly</b>	<ul style="list-style-type: none"> <li>- Dock vessel</li> <li>- Survey hull</li> <li>- Inspect propeller,</li> <li>- Clean underwater area, re-apply paint system</li> <li>- Survey sea water systems, ships side valves</li> <li>- Repaint upper works and Cabin</li> <li>- Survey fire safety gear</li> <li>- Change anodes in engine block</li> <li>- Fire drill by local metropolitan fire service</li> <li>- Engine service (contract)</li> </ul>
<b>Five yearly</b>	-

**Note:** - An entry must be made in the Ship's Log Book when the above routines are carried out. Any defects that cannot be corrected while the vessel is in the water and on display should be noted on a separate sheet for rectification at the next dry-docking

## Appendix E – Events And Displays

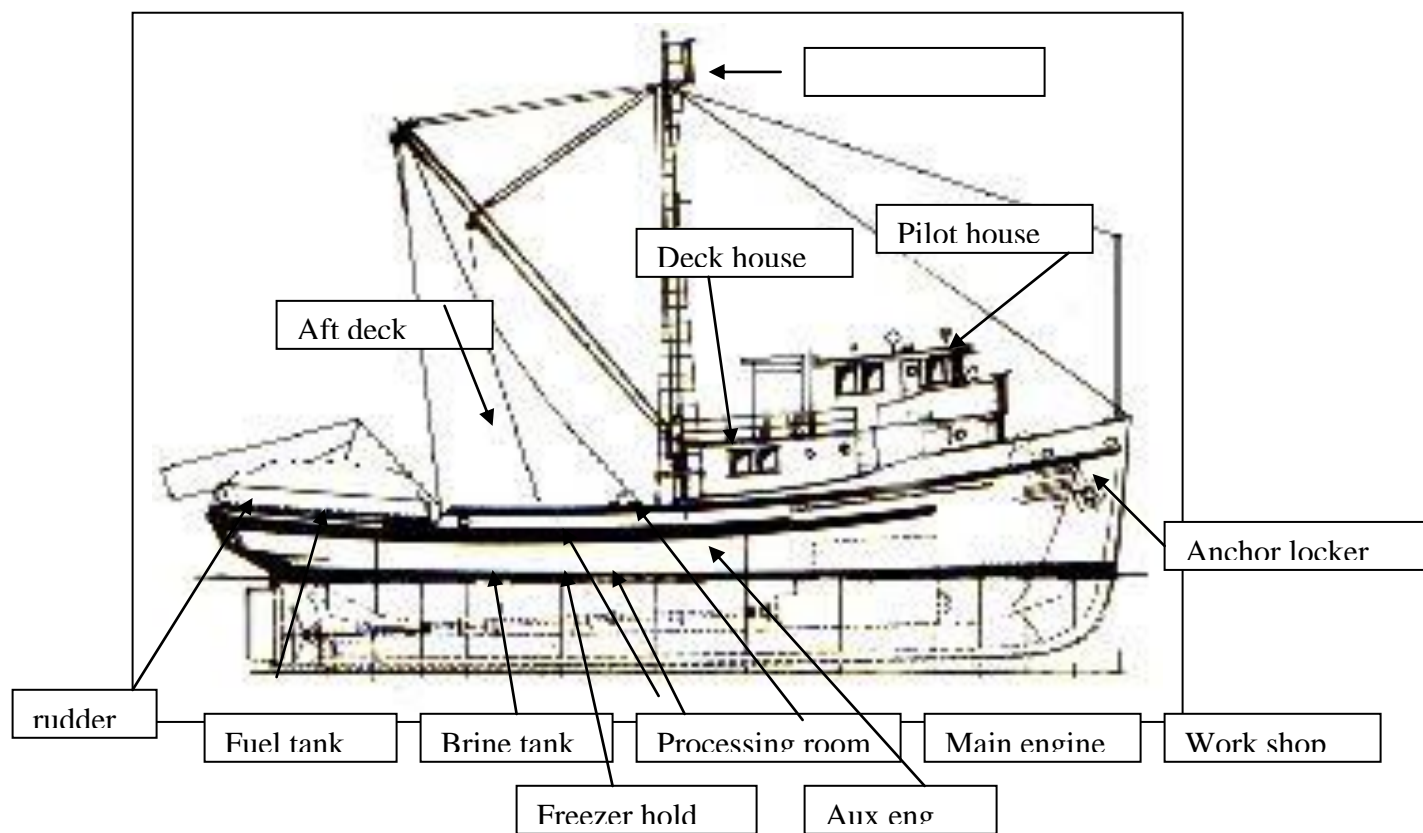
There are a number of local events and activities for *TACOMA* to participate in, including:

- *Tunarama Port Lincoln's Annual Festival 3 Days*
- *Schools Trips*
- *Visits Of Dignitaries*
- *Weddings And Special Delegations (Muroto, Japanese Sister City)*
- *Blessing Of The Fleet*
- *Tuna And Seafood Promotions, Out Of The Blue.*



PHOTO 17 DRESSED FOR A QUEEN 1954

## Appendix F - Diagrammatic of the vessel



## **Appendix G – Fund Raising -Sponsorship, donations, membership**

Port Lincoln's working waterfront spans international routes with its grain trade back to early whaling fleets. This heritage is expertly captured in the Axel Stenross Museum. Sharing these stories of our community and making the Tacoma tuna project become the regions premier maritime tourism and community resource requires financing. The Tacoma project has strong potential to raise money to support the project.

The Tacoma preservation society seeks to raise finance over the next five years from private sources to continue the in water display of the tuna clipper MFV Tacoma for another 50 years of community service, and establish its programming activities.

Public funds will be accessed to prepare the Tacoma for its new role as the flagship of Port Lincolns fishing heritage.

Additional public and private funding will be used to develop potential future facilities on land for the effective housing of tuna history for the public use and enjoyment

### ***Sponsorship***

Sponsorship will be sought to support the on water display of *MFV TACOMA* as a working tuna clipper. This may take the form of services and products.

Some commitment has already been indicated for slipping of the vessel.

Potential sponsors

- Banks, marine supply companies, fish supply co, insurance co, oil & fuel co.
- Tuna families, Japanese fish buyers, exporters
- Government – local, state, federal
- Educational, historical groups
- Interested locals.

Preparation of a sponsorship strategy and operational plan is recommended.

### ***Donations***

A Public Fund will be established to enable donations of the vessel and monies to be tax deductible.

### ***Membership***



Becoming a member is an excellent way to support *TACOMA*'s programs and experience the engine beat of a tuna clipper as it races for the school of fish or chugs home, decks awash and its holds full of fish.

Memberships will be made to fit all levels so it is possible offer everyone to be part of this project, for instance through the lifetime of the Southern Bluefin tuna live bait and poling industry which lasted from the early 1950s to the mid 1980s many hundreds of young men from all over Australia participated in the industry as polers. For this group this experience was one of the great adventures of their life. To enhance this memory the concept of a polers wall with all the names of participating fishermen is an opportunity worth developing.

### ***The Future***

We wish to develop Eyre Peninsula's most comprehensive on-water maritime heritage facility

- Preserve a historically authentic facility, providing interactive exhibits and activities for people of all ages that present compelling stories - told on the boat where that exciting history took place.
- Provide an education venue that supports age-appropriate coursework for students in regional public and private schools and universities
- Create a day-use boating destination that reconnects our city to the wilds of the Southern ocean

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## Appendix H – manning and volunteer program

. It is recommended that the MFV *TACOMA* will be fully manned.

Port Lincoln's fishing history is, in world terms, a recent one, with the major fishery of tuna established post WW11. This has resulted in a workforce that is now just reaching retirement age. This resource of interested retired fishers has the capacity to provide the *MFV TACOMA* with an enthusiastic group of volunteers who would be keen to preserve their own history. Added to this is Port Lincoln's capacity to attract retirees who are drawn to the seaside and an active working fishing port. The Axel Stenross Museum has an active group of volunteers primarily made up of sailors and ex-naval and merchant marine personnel. Their average age exceeds 65 years. *TACOMA*, as an active display based on Stanford's observations, should be capable of full manning itself.

Peter Stanford's comments are of interest in the relationship between the two techniques of preservation.

[How We Preserve Ships in a Diverse Local Museum.](#) - Andy King - Bristol

Industrial Museum

Peter Stanford - N.M.H.S

*The volunteers would not be as many, nor would they be as committed if we had static machinery. Our policy has always been to bring things back to life, sometimes taking steps, which might be frowned upon by some of you. I believe that our vessels are better maintained by working them, that an equivalent of a ship's crew builds esprit de corps that you don't get with a stationary lump, and that gradual decay gets noticed and remedied more easily and quickly by people who are frequently aboard and familiar with the vessel.*

The formation of a vessel manning group will develop a training package along side a volunteer program targeted at keeping the volunteer active and interesting and developing qualified people who can effectively operate the Tacoma.

In looking at these aspects the VMP has drawn on several papers delivered to the Third International Conference on the Technical Aspects of the Preservation of Historic Vessels

Conference Proceedings

[Conserving Unique and Historic Ships](#) - John Kearon - National Museums & Galleries on Merseyside.

[Vessel Preservation Standards](#) Kevin Foster - US National Park Service Maritime Initiative

Dr. Robert Prescott - Scottish Institute of Maritime Studies

[Satisfying The Paying Public: The Effective Interpretation of Historic Ships and Boats](#) - Matthew Tanner - National Museums & Galleries on Merseyside

[How We Preserve Ships in a Diverse Local Museum.](#) - Andy King - Bristol Industrial Museum

Peter Stanford - N.M.H.S

[The Pros & Cons of Permanently Dry-Docking Historic Vessels](#) - Captain S.T.

Waite - *Cutty Sark* Preserving Vessels In A Diverse Local History Museum