



Significance Assessment

Beverley Aeronautical Collection

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PART I

EXECUTIVE SUMMARY

Significance is a guide to help assess the significance of the heritage objects and collections in your care. It takes you through a simple significance assessment process that equips you to make sound judgments and good decisions about conserving, interpreting and managing objects and collections, now and into the future.

*A Guide to Assessing the Significance of Cultural Heritage Objects and Collections*¹

This is a broad assessment of the significance of the Beverley Aeronautical Museum's collection. The collection comprises five airframes and aircraft, and aviation parts and memorabilia. In addition there are a number of sub-collections including models of commercial, civil and military aircraft, a photographic and pictorial display collection, and a number of aviation publications. The collection is associated with pioneers of Western Australian, and the history of Australian military and civil aviation in the twentieth century. A number of home-built aircraft are represented in the collection.

The museum was established in 1967 to house the *Silver Centenary*, a 1929 bi-plane, and in memory of its builder Selby Ford. It was purpose-built as an aeronautical museum by the Shire of Beverley who manage the museum until recently in partnership with the Beverley Tourist and Development Association.

The main themes of the collection are

- the *Silver Centenary*
- The *Amana* Crash and Memorial
- World aviation history
- Australian aviation pioneers
- Early aircraft construction
- Home Built Aircraft
- Western Australian aviation pioneers
- Western Australian aviation services
- Military aviation
- Aero Clubs in Western Australia
- Charles Kingsford Smith
- Royal Australian Air Force and Pearce Base

Overall the collection has mostly moderate social, aesthetic and historic significance. This report highlights a small number of items that demonstrate moderate significance. Further investigation of the collection is required, however, to analyse and enhance the collection.

The most important items include:

- Amana Memorial
- *The Flying Flea*
- Photographic display
- Vampire A79-638 and parts, Vincent Street, Beverley
- Vampire A79-651, Hunt Road, Beverley

¹ *A Guide to Assessing the Significance of Cultural Heritage Objects and Collections*, Heritage Collections Council, Canberra, Commonwealth of Australia, 2001

There is a need for an established collection methodology, accession and cataloguing procedures across the collection to improve documentation, reduce risk and ensure the continued significance of the collection into the future. That will be enhanced by the preparation of a complete listing of all items and further analysis.

The condition of the collection as a whole is good to fair. Most of the objects are kept undercover in the museum however the exhibition space is crowded leading to damage of the objects and discontinuity of interpretation and display. Improved display facilities, conservation, storage and documentation of the collection would provide greater access to the public, and importantly ensure the continued preservation of the collection into the future.

METHODOLOGY

Consultation and Collection research with Owners

The Shire of Beverley commissioned this report to undertake a broad assessment of the significance of the Beverley Aeronautical Museum's collection. The Report provides an overview significance statement for the collection and recommendations to assist in the future documentation and assessment of the collection. Brief details of the most significant objects in the collection are included in the report. The assessment is based on the criteria for objects and collections as outlined in *Significance 2: A Guide to Assessing the Significance of Cultural Heritage Objects and Collections*.

The assessment process was conducted in two stages: working with the Shire of Beverley and consultation group to prepare for the assessment; and the assessment of the collection and organisation. The consultant made two visits to the Museum: one day in August 2015 and then two days in October 2015.

The consultant met with and briefed shire staff, councillor and former museum volunteers, and viewed the collection and museum. At this session the consultant and the group reviewed the collection and the organisation, including its aims, needs and future directions. They planned an Open Day to consult the community.

Consultation group

Reg Behn	Belinda Foster	Sheila Sheehan
Rodney Boyle	Peter Gogol	Ted Sheehan
Barrie Burns	Kathryn McLean	
Kath Ferguson	Roma Paton	

The physical assessment of the collection was conducted onsite, the consultant working with Kathryn McLean, Community Development Officer, Shire of Beverley and Belinda Foster and Barrie Burns, formerly members of the Beverley Tourist Development Association. The consultant appraised the collection and storage areas and carried out a basic assessment of the general condition of the collection. This was followed by more in-depth analysis of the items nominated as having probable significance.

Kathryn McLean collated information about the collection and contact details of museum volunteers, and organised an Open Day for community consultation. Ms Slarke provided a media release about the project and advertised in the West Australian's *Can You Help* calling for information and inviting the public to the Open Day.

The second site visit took place in October 2015 over two days. The consultant attended the Open Day, discussing the collection with visitors and recording information about specific items. Ms Slarke facilitated a session with stakeholders to draw up a short-list of items of probable high significance. Five items/sub-collections were identified as significant in accordance with the criteria as outlined in *Significance 2* and these were nominated for further investigation.

The consultant worked with prepared checklists to assess the items identified most significant, compiled notes onsite, surveyed condition and storage and took photographs. The consultant checked and matched the existing documentation (where available) to each item. The consultant reviewed and documented collection records, and assessed how the records backed up the collection.

Throughout the assessment process, the consultant had discussions with and sought information from people involved with the museums. The consultant contacted people knowledgeable about collection items and history. Former museum volunteers/ committee members, particularly Roma Paton, Belinda Foster and Kath Ferguson, and former shire staff have helped to inform provenance of particular items and the history of the collection and organisation.

Use of object files

Accession documentation for the collection is limited. Varied information about individual items is located in the museum and shire archives. Few of the objects in the collection have been catalogued and there was no complete list of the collection. There are some archives relating to donations; correspondence between donors and BT&DA and/or the Shire acknowledging donation, and some completed donor forms commencing from the late 2000s. The consultant undertook considerable research, particularly to establish provenance. Sources include property and correspondence files, meeting minutes, photographs and newspaper reports.

Kathryn McLean compiled a summary of the collection and photographed the objects and display for the consultant's reference. The consultant collated a draft inventory from these. During the first site visit, the consultant, using the draft inventory, located and examined items. The consultant documented each item and its information if present. The Draft Inventory of the collection compiled through this process records a short description of items, dates and donors if known.

Contact other similar collections to identify comparative collections

The consultant undertook comparative analysis within the budget and time parameters of the project. Ms Slarke and the group discussed and identified comparable collections in Western Australia. The consultant further identified, reviewed and contacted other aviation museums in Australia with comparable collection items.

- Aviation Heritage Museum, RAAF Association of WA
- Cunderdin Municipal Museum
- Australian Aviation Museum, Bankstown

- Historical Aircraft Restoration Society
- Queensland Air Museum
- RAAF Museum, Point Cook
- South Australian Aviation Museum
- State Library of Western Australia collection
- Temora Aviation Society Museum
- The Airways Museum & Civil Aviation Historical Society

Summary description of the organisation and its collection

Beverley Aeronautical Museum (BAM) and its collection were established in 1967. The collection consists of 5 aircraft and airframes, models, aviation parts, photographs, objects and memorabilia associated with the history of aviation. The Shire of Beverley and the local community, primarily through Beverley Tourist and Development Association, established and manage the collection

Beverley Aviation History

- 1919** Major Norman Brearley visits Beverley conducting joy flights and inspiring Selby Ford to later build a bi-plane
- 1930** Benson's Field opposite Dead Finish Museum, used as airfield
- 1930s, 1940s** Paddock east of current CBH bin (known locally as the Old Aerodrome) used as airfield
- by 1944** Current airstrip is built, one of five satellite airstrips near Perth for the Royal Navy Fleet Air Arm (RNFAA) to support the intended British Pacific Fleet and the existing Eastern Fleet during World War 2. Inherit listed
- World War II** Spotting stations temporarily established throughout the district
- 1950** Crash of the ANA Amana near York
- 1970** Beverley Air Show at the Beverley Airstrip for Aviat70, a national event
- 1970s** Gliding Society began operating, now State club with many members
- 1979** *Silver Centenary* Fly-In, Sport Aircraft Association of Australia, WA
- 1980s, 1990s** Paragliding from the Beverley air strip
- 2000** Beverley Air Show
- 2000s** RFDS and Rescue helicopters use the town oval and air strip
- 2000s** Hercules from Pearce Airbase conducts day and night military exercises

History and Significance of the Organisation and its Collection

The Beverley Roads Board was established in 1871. A separate authority, the Beverley Municipal Council was responsible for the Beverley townsite from c.1892 to 1913 then integrated with the Beverley Roads Board. With the new Local Government Act in 1960, Beverley Roads Board became The Shire of Beverley, eight councillors replaced the Board and the Shire Clerk replaced the Secretary of the Board positions. The current Shire Office and Chambers in Vincent Street were constructed in 1989 and the number of councillors increased to nine. The Local Government Act of 1995 brought further organisational changes including the Shire Clerk position being restructured to the Chief Executive Officer role.

The Museum and the collection were established in 1967. The Shire of Beverley maintains the building and contributes funds to the operation of the museum through its annual budget. Throughout the history of the museum, Shire staff and councillors have been involved in different capacities – from making curatorial decisions, collaborating with a community group, to overseeing a mostly autonomous committee.

Beverley community has been involved in the management and operation of the Museum in partnership with the Shire of Beverley since inception. A committee formed in November 1963 with the aim of establishing a museum as memorial to local Selby Ford. The group worked with Shire of Beverley staff and council to realise the project.

The Beverley Tourist and Development Association (BT&DA) later took on the role of operating the Museum. The BT&DA was established in 1975 and later incorporated. The group established a tourist bureau in the Dead Finish Museum in 1992, and then approached Council to operate from the Aeronautical Museum in an effort to keep the museum open daily. Council resolved to allow BT&DA to operate the facility as a joint Tourist Bureau and Museum. A committee managed the Association and was responsible for the governance of the organisation and the management of the museum and collection. The Shire had previously employed local curators however from this period on most involved were volunteers from this group. They undertook tasks such as opening the museum and welcoming visitors, accessioning, promotion and displays.

Key people/curators/volunteers have included:

Dina Barrett-Lennard	Barrie Burns	Fred Bremner
Keith Byers	Des Cunningham	Glenise Domyer
George Ferguson, curatorial	Nita Ferguson, curatorial	Belinda Foster, curatorial
Michelle Garwood	Peter Harbin	Keith Hays
Tony James	Richard Jas	Wayne Kendrick
Frank Matthews	Ian Nicholson	David Paton, curatorial
Roma Paton, curatorial	Jenny Rayner	Mal Roberts
Sheila Sheehan	Tony Sheehan	Wally Smith
John van Teil	Jack Wallace	Judy Wallace
Lloyd Webb		

A large number of volunteers have given considerable labour, skills and resources to the museum since its inception – to manage, curate and maintain the collection and museum and open it for visitors. The community has rallied a number of times in support of the museum - to raise funds to establish it, to keep the museum operating, to retain the *Silver Centenary* and to rebuild the collection and keep the museum operating following the removal of the *Silver Centenary*.

The BD&TA was dissolved in 2014 and tourism information was moved to the Community Resource Centre in 2015. A local businessperson now uses the reception area for an office and opens the museum for visitors on the days he is present. At other times, visitors can obtain a key to the museum from the Shire and CRC offices, and on weekends from the Caravan Park caretaker. Groups can arrange visits with CRC Visitor Information Centre by appointment.

History of the Museum

Beverley Aeronautical Museum is located on Vincent Street, Beverley, and comprises a small brick purpose-made building, with a small storage shed at the rear. Museum archives are now stored in the Shire office and at the Community Resource Centre.

The Museum holds a collection of retired aircraft, airframes, models, aviation parts and equipment, photographs, prints and publications. The collection is associated with the history of local, West Australian and Australian aviation from the early twentieth century. The collection includes items located inside the museum with two airframes located in

front of the building and adjacent to Hunt Road. There are approximately 150 photographs including images of the *Silver Centenary*, early Western Australian and Australian aviation events, aircraft and pilots, and military aircraft.

The *Silver Centenary* bi-plane built by locals Selby Ford and Tom Shackles was central to the collection. In 1928, inspired by his joy ride with Major Norman Brearley in 1919, Selby Ford built a bi-plane. He began by drafting plans in chalk on the floor of the Beverley Powerhouse which he owned and operated. Ford's friend and local butcher Tom Shackles assisted in the construction of the aircraft. Both men had no aeronautical experience and limited knowledge of aircraft design and construction. Most parts were hand-built and they obtained the engine from an aeroplane that had crashed in the East-West Air Race of 1929.

They named the aircraft *Silver Centenary* as it was completed in 1929, the centenary of Western Australia and for the colour of its livery. The *Silver Centenary*, piloted by Captain CHF Nesbit, chief pilot of WA Airways, made its inaugural trial flight from Mr Benson's paddock in Beverley on 1 July 1930. On 4 July 1930, with Selby Ford as passenger, Nesbit flew to Maylands Airfield where US aviator Amy Johnson and Major de Havilland inspected the aircraft.

The *Silver Centenary* made a number of flights in 1931. However, as Ford never made detailed plans, the Civil Aviation Branch refused to issue a Certificate of Air Worthiness and granted an experimental licence only. The *Silver Centenary's* last flight was to the Narrogin Aerial Pageant in December 1931 and then Ford stored the aircraft in the Power House. He died in a car accident in July 1963.

Following the death of Selby Ford, Beverley community raised funds for a memorial to honour his public service. A community committee first suggested a clock at the town hall. After it was discovered that Ford's bi-plane was to lose its home at the Power Station after the transition to SEC, Council resolved to erect a building to house the aircraft. Council called a public meeting where it was resolved to support an Aeronautical Museum.

The Western Australian Tourism Development Authority contributed \$5,333 towards the cost of the museum and collated history and photographs about WA aviation for the museum display. Mr Reynolds, builder, won the tender (\$10,876). The building was completed in May 1967 and officially opened on 13 October that year.

History of the Collection

The collection includes partially restored and unrestored aircrafts and airframes – from unpowered home-built 'glider' to jets – models, parts and aviation memorabilia. The aircraft and parts in the collection were made in Western Australia, within Australia and in the United Kingdom and United States of America.

The collection comprises approximately 23 individual items including five aircraft and airframes. In addition, there are number of sub-collections:

- Large models of commercial aircraft (x6)
- Small models of aircraft (x42)
- DH Vampire parts
- Siddeley parts
- Photographic and Image Collections/Display
- Amana memorial items

- Books and publications

Shire and museum staff and volunteers, as well as donors have shaped the collection. The first acquisitions were the *Silver Centenary* aircraft, the photographic collection and “an aero engine donated by Captain Woods” in 1967. These were followed by the A79-638 Vampire jet in 1970 and *The Flying Flea* in 1983. The *Amana* Memorial was installed in 2001 and *The Flying Plank* and *Grasshopper* came into the collection following the removal of the *Silver Centenary*. The *Silver Centenary* and first Vampire airframe were received direct from donors. The later aircraft, objects and photographs came from a variety of sources, and were largely sourced by shire staff and/or the managing group.

The *Silver Centenary* featured as central exhibit in the museum from 1967 until 2006. No formal agreement regarding the donation of the *Silver Centenary* existed between council and Ford family. Shire archives include a 1981 ten-year lease agreement between the Executors of the Estate of Selby Ford and The Shire of Beverley for the plane. The Shire released the aircraft from the Ford family in January 1991. Rodney Edwards, pilot and grandson of Selby Ford, purchased the *Silver Centenary* from Rita Ford’s estate in the late 1990s and leased the aircraft to the Shire of Beverley and later BCDA until Sept 2005. In 2006 Mr Edwards removed the *Silver Centenary* from the museum collection and restored the aircraft to flying condition. He made a test flight in 2007 and, in February 2009, a return flight to Beverley in the restored aircraft.



David Paton signing lease for the Silver Centenary on behalf of Beverley Tourist and Development Association

Collection Records

Collections records are varied for different items:

- Some minutes of BT&DA committee meetings
- Shire of Beverley archives and correspondence with other museums, community committees, museum curators and volunteers
- Correspondence with donors including the Ford family
- Display text identifying and interpreting Items
- Photographs, images, anecdotal and published reference material

Relationship between the building and its contents

The collection is housed in the Beverley Aeronautical Museum on Vincent Street, Beverley in the town centre. The Ford family ran open-air picture shows on the block during the 1950s and 1960s. Beverley Roads Board later purchased it from the family. The building was purpose-built on the site as an aeronautical museum, to house the *Silver Centenary* and as a memorial to Selby Ford. It opened in 1967.



Commemorative plaque (right), unveiled by Mrs Rita Ford, widow of Selby Ford, at the official opening of Aeronautical Museum on 13 October 1967.

Community Comments and Engagement

The museum is located in the town centre, facing north to the Shire offices, Library and Community Resource Centre. Signage to encourage visitors is located on the town outskirts. The museum is open to the public on a non-regular basis and by request. Visitors are also welcome for special events.



In the past, the managing committee and shire staff promoted the museum through tourism initiatives, brochures, and souvenirs and in conjunction with special events such as the Beverley Air Show. The museum or particular aircraft feature on numerous tourism, aviation and museum websites. The museum is listed in the Wheatbelt Museum and Heritage brochure published by Museums Australia, WA.

The museum features a display of various planes including the hand-built "Grasshopper", a man powered aircraft built to enter the 1977 Bird Man Rally, and the "Flying Flea" built in the 1930s. There is also a pictorial display of Royal Australian Air Force planes, early Western Australian aviation pioneers and the de Havilland Vampire jet used for pilot training and combat.

As part of information gathering for this report, the Shire hosted an Open Day to consult the community about its collection and to speak with the consultant. The consultant and shire staff advertised the event and personally invited individual people including former museum volunteers and those known to be interested in local heritage. Twelve people attended the Open Day. The consultant viewed the collection with the visitors and recorded their comments and stories about particular objects. Visitors were invited to complete a short questionnaire to give their thoughts about the collection:

Questions	Responses
<i>What are the most important items in the collection? Why?</i>	<ul style="list-style-type: none"> • The WA Commercial Air Services history, because it has a large influence on the development of WA – particularly the Northwest • The engine of the Vampire • <i>Silver Centenary</i> info • Any local content • Vampires now serve as landmarks to the town
<i>What important stories should the collection tell?</i>	<ul style="list-style-type: none"> • WA story is nice from a local perspective (as opposed to war aviation or overseas development) • History – aviation – Beverley • Local aviation only
<i>What is missing from the collection?</i>	<ul style="list-style-type: none"> • The “<i>Silver Centenary</i>” built by Selby Ford and Shackles • Local content – Beverley Soaring Society and gliding, War aviation History, recent Air Force use of airfield, air shows
<i>Your Suggestions, Comments or Memories</i>	<ul style="list-style-type: none"> • Great mix of stories and memorabilia – local, WA, wartime, Australian, etc. • Preserve and house the collection in a bigger shed • Model of <i>Silver Centenary</i> to be commissioned. • Collection needs to be manageable, good accession and deaccession policy • The <i>Silver Centenary</i> is important to the community. It is on the Shire crest and signs.

Other comments

- The community feels strongly about the *Silver Centenary* and the Vampire jets
- If tried to remove or close the museum there would be an uproar, otherwise silent. There was an uproar when the *Silver Centenary* was removed. Happy to see it flying again.
- I think the museum should remain where it is as a legacy to the Ford Family. Further promote the museum and encourage school and local youngsters to learn more of our aeronautical heritage, incorporate clubs like the Soaring Society. If anything the museum should be upgraded and updated – not downsized.
- *See Appendices for other comments*

Exhibitions and Displays

The following key themes are represented in the collection and interpretation:

- The *Silver Centenary*
- The *Amana* Crash and Memorial
- World aviation history
- Australian aviation pioneers
- Early aircraft construction
- Home Built Aircraft
- Western Australian aviation pioneers
- Western Australian aviation services
- Military aviation
- Aero Clubs in Western Australia
- Charles Kingsford Smith
- Royal Australian Air Force and Pearce Base

Condition of the collection

The general condition of objects is appraised using the following criteria:

- Good** The object is in a reasonable state of preservation. It is clean and generally in a stable condition. Any deterioration is minor and does not detract from display potential
- Fair** The object is in need of some attention before it is displayed
- Poor** The object is not structurally sound. It is subject to environmental conditions that cause deterioration and it will be lost if steps are not taken to preserve it.

The consultant conducted a basic assessment of the overall condition of the collection. Most aircraft and small objects are housed undercover in the museum with two Vampire jet airframes stored outside (at the front of the museum and adjacent to Hunt Road). Small objects are placed on shelves or on the floor.

The museum is a brick construction with banks of windows on the south, east and west sides. Two sliding metal panelled doors and a sliding glass door take up the wall on the north side. The floor is carpeted. The museum floor space measures approximately 11 metres by 13 metres. The ceiling height measures approximately 2.85 metres. The office at the front (approx. 2.5 m x 12.9 m), a later addition (possibly mid-1990s) for a Tourist Bureau, is divided into storage and reception area. There is an external entry door to this space and another from this to the museum space, both of which are lockable. A small shed is located at the rear of the block. The site is fenced on three sides with the north side open to the street.

The objects require appropriate conservation techniques and handling. Space inside the museum is limited and the area overcrowded with exhibits. While large aircraft located in the centre of the space are behind a roped-off barrier, they can easily be touched by visitors risking damage to the objects and visitors. People moving through the space can inadvertently cause damage to the collection. Any handling or exhibition of the objects should follow appropriate risk management.

Through the assessment process, stakeholders identified the following issues related to the museum and/or collection:

- Housing
- Access, open to the public
- Extensions (if new museum does not proceed) including toilet and kitchen
- Museum policies
- Records management
- Space to work in
- Training - coordination, upkeep, restoration, conservation, interpretation (templates)
- Needs a community group/committee to oversee

Strengths

- History of aviation
- Good for school visits and tour buses
- Good distance from Perth for day trips
- Setting in main street
- Vampire
- Photographic history
- Families – kids like model aircraft

Reports and Reviews

- 1976 - Beverley Shire Council formed a committee to consider plans to enlarge the Museum
- Late 1990s/undated - Report on Museum by David Paton
- 2001 – The Beverley Aeronautical Museum, Aviation History Assignment, Edith Cowan University students
- 2001 – Report on the Redevelopment of the Beverley Museum and Tourism Bureau, for the Beverley Tourist & Development Association Inc. by Rosalie Pech Eva Designs
- 2002 – Report to BT&DA by Roma Paton
- c2002 - *How Much is the Silver Centenary Worth to the Town of Beverley?* Roma Paton,
- 2014 – ADC Projects Sketch Plans for a new Multipurpose Community Centre on museum site and adjacent Infant Health Clinic

Statement of Significance for the entire collection

The museum was established in 1967 to house the *Silver Centenary*, a 1929 bi-plane, and in memory of its builder Selby Ford. It was purpose-built as an aeronautical museum by the Shire of Beverley who manage the museum (until recently in partnership with the Beverley Tourist and Development Association).

The collection held by BAM includes five airframes and aircraft, and aviation parts and memorabilia. In addition there are number of sub-collections including models of commercial, civil and military aircraft, a photographic and pictorial display collection, and a number of aviation publications. The collection is associated with pioneers of Western Australian, and the history of Australian military and civil aviation in the twentieth century. A number of home-built aircraft are represented in the collection. The *Silver Centenary* and a large collection of photographs were the first items in the collection.

The most important items include:

- *Amana* Memorial
- *The Flying Flea*
- Photographic display
- de Havilland Vampire A79-638 and parts, Vincent Street, Beverley
- de Havilland Vampire A79-651, Hunt Road, Beverley

Overall the collection has mostly moderate social, aesthetic and historic significance. Some of the makers, designers and events are well known and researched. The individual items range in their significance. Generally the items in the collection are not particularly rare or significant for their scientific or research potential however further investigation particularly of provenance is required to determine these.

The Vampire jets are representative of Australian aviation manufacturing and the evolution of military aviation and pilot training in Australia, and historically and aesthetically significant to that wider story. The *Amana* Memorial, with associated interpretation, is primarily of social significance as a monument to the people who died in that tragedy.

The home-built aircraft demonstrate the varying skills and aesthetics of the people who made and used them. They have aesthetic significance particularly *The Flying Flea*, as examples of

experimentation, simplicity of design and construction and the aspirations of amateur aviators. *The Flying Flea* is also of historic significance because of its associations with designer Henri Mignet.

The collection is complemented by a large and interesting display collection of photographs and images associated with the history of aviation services in Western Australia. These are not complete. They are historically significant for their content and have interpretive potential particularly in relation to collection items, and especially the *Silver Centenary*. Most are reproductions however and other than the captions and display information have little documentation regarding provenance.

The interpretive potential of the collection is good, and it is evident there are many stories to tell through the collection however without the information from good provenance, the interpretive potential is reduced.

The condition of the collection as a whole is good to fair. Most of the objects are kept undercover in the museum however the exhibition space is crowded leading to damage of the objects and discontinuity of interpretation and display. The collection is in need of better storage and display facilities.

The building has high social significance to the local community who initiated and raised funds to build it, and then developed the collection and operated the museum. The removal of the *Silver Centenary* from the collection has diminished the overall significance of the collection.

The collection has historical associations with the Beverley district and Western Australia either through the objects or the donors and is considered by some in the community to be of importance and value. This is a significant collection not only to the local community, but also to a wider audience including former residents and their descendants. Additionally it is valued by aviation enthusiasts and specialist groups. It is important as one of Western Australia's oldest aeronautical museums.

Key Recommendations *(no order of priority)*

It should be noted that the recommendations are made on the existing museum, conditions and collection and without reference to any proposed developments on the site.

- Develop and implement collection, conservation and interpretation policies for the collection
- Source funding to assist with conservation of the collection, including storage and servicing facilities
- Seek expert advice and investigate the significance before starting any conservation or restoration work on individual items
- Establish fundraising or sponsorship programs for specific items
- Apply for funding for training , equipment and support
- Develop training programs (including significance, accessioning, care and handling of materials)
- Identify and recognise gaps in the collection (for example, *Silver Centenary* replica, agricultural aviation, World War II spotting stations)
- Establish object files for key objects in the collection. Find and record photographs, histories and objects in the wider collection that relate to these.
- Develop a complete collection list/database for the collection - include digital photographs and a good description of each item
- Review and deaccession irrelevant material from collection
- Establish backup and preservation practices for digital records including those produced through the significance assessment (for example, the inventory)
- Investigate scanning and digitally archiving photographic and image collection. Obtain permission to reproduce images where necessary.
- Schedule regular condition inspections of collection items
- Conduct a safety audit of the building and collection. Check for features which could injure or endanger people. Use barriers and signage to warn of possible risks and prevent access. Schedule regular inspections.
- Protect small objects from possible theft by securing them with suitable fittings
- Encourage volunteering (on a project basis or to the committee). Approach specific people, such as those who attended the Open Days and/or have interest and knowledge about the machines to help, advise, join the group
- Develop succession planning for key roles and knowledges within the organisation
- Engage with the community and wider public to inform them about the collection and organisation
- Promote ways whereby visitor and supporters can give written feedback and share knowledge and histories (for example, visitor book, website, memento cards) and record these
- Investigate commissioning a replica or model of the *Silver Centenary* for the collection

PART II

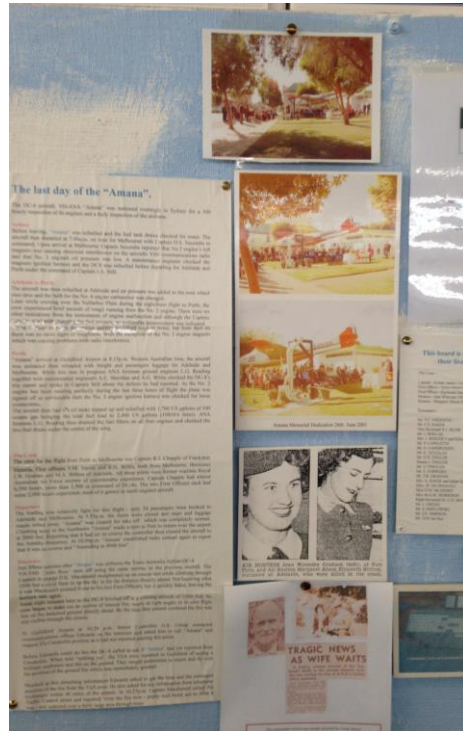
Detailed assessment of the most significant items in the collection

- *Amana* Memorial
- *Flying Flea*
- Photographic and Pictorial Display collection
- de Havilland Vampire A79-638 and parts (Museum)
- de Havilland Vampire A79-651 (Hunt Road)

For further investigation

- De Havilland Gypsy Queen 30 engine
- Flying Jacket
- Vulcan truck Radiator Cap ornament, Charles Kingsford-Smith's Gascoyne Transport Company
- *The Flying Plank* glider
- Bristol Siddeley engine
- Plessey Instrument Panel

The Amana Memorial



Description

Metal landing gear and plaque mounted on a metal stand as a memorial to the *Amana* aircraft crash.

Specifications

Make and Model	One-off monument Components from Douglas DC-4 Skymaster 1009, registered VH-ANA
Year of manufacture	1944/5, 2001 (as memorial)
Dimensions	Approximately 214mm tall x 900mm wide on stand
Marks and imprints	<p>Wheel rim inscriptions include: GOOD YEAR 590408 ASSY 51106, SERIAL 61717, PATT. 30866, DOHTA</p> <p>The plaque is engraved:</p> <p style="text-align: center;">MEMORIAL Australian National Airways Skymaster DC-4 'Amana' Crashed 10-12pm 26th June 1950 38.5 statute miles from Guildford Aerodrome enroute to Melbourne via Adelaide ALL KILLED</p> <p style="text-align: center;"><u>CREW</u> R.J.C. CHAPPLE - Captain, V.M. TREVITT - First Officer, R.H. WILLIS – First Officer, J.W. GRAHAM – Hostess, , M.A.E. BRITTON – Hostess</p>

	<p><u>PASSENGERS</u></p> <p>Mr. V.C. ANQUETIL, Mr. E.S. BAKER, Very Rev. N. BLOW, Mr. J. BOKLAK, Mrs S I. BORSZEKY (and infant), Mr. P. CAPELETTE, Mr. G. CARMICHAEL, Mr. K. DOUGLAS, Mr. D. N. ENGLER, Master J. ENGLER, Mr. V. FINEGAN, Mr. E. W. FORWOOD (Died from injuries 1-7-1950), Mr. T. R. GRAHAM, Mrs. G. HAESE, infant Sandra Joy HAESE, Miss M. McDOUGALL, Miss D. M. McHENRY, Mrs. M.A.M. MORRISON, Right Rev. Dr C.MURRAY, Mr. L. ORSZAB, Mr. S. PAWLOWSKI, Mr. I.H. SIMPSON, Mr. TAN JEE HOE</p> <p>Dedicated 26th June 2001</p>
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History and Provenance

This is a memorial to the victims of the ANA *Amana* crash. On 26 June 1950, a Douglas DC-4 Skymaster crashed near York after leaving Guildford aerodrome en route to Adelaide. All twenty five passengers and five crew died. It was the worst civil aviation accident in Australia at that time. An inquiry into the crash was held.

The memorial was made from part of the landing gear of the crashed aircraft. Kath and Barry Ferguson of Beverley salvaged the landing gear in mid-1992 from Mr W Barton, the owner of the property where the *Amana* crashed. The Fergusons noticed the landing gear and other parts of the crashed aircraft. Mr Barton reported that he was selling the parts for scrap metal after offering it to another historical group. Barry Ferguson brought the landing gear to Beverley and offered it the Beverley Tourism Development Group for the Museum.

The Aircraft

The *Amana* was a Douglas DC-4 Skymaster 1009, a four engine propeller driven aircraft first flying in 1946. The DC-4's were utilised during World War Two and then from 1945 by civil airlines worldwide. The Douglas Aircraft Company, based in Southern California, developed the aircraft. Donald Wills Douglas, Sr. founded the company in 1921, and in 1967 merged it with McDonnell Aircraft. In 1997 McDonnell Douglas merged with Boeing.

Australian National Airways

Australian National Airways Pty Ltd was a major carrier in Australia from the mid-1930s to the early 1950s. Led by Ivan Holyman, the airline had its origins in the Holyman's Airways founded in Tasmania in 1932. The carrier merged with and took over a number of other interstate airlines to form ANA in 1936.

The airline was a competitor to Qantas, Ansett and TAA in the early years of civil aviation. ANA introduced air hostesses to its service in 1936, the first carrier in Australia to do so. During World War II until June 1940, ANA provided the RAAF with pilots and aircraft for coastal surveillance. BY 1945-46, ANA had a fleet of over 30 aircraft, including five new DC-4s, and almost 4000 employees. Its engineering department was the largest of airlines in the southern hemisphere. In 1946, it flew the longest internal route mileage of any airline in the world, and carried nine times more passengers than its closest competitor.² ANA's routes linked every capital city and dozens of regional centres throughout the Australia, and it began a regular service to North America. The airline maintained and crewed aircraft for the Directorate of Air Transport, flying troops and supplies to New Guinea and the Pacific Islands. ANA also operated DC-4s for British Commonwealth Pacific Airlines (BCPA) and Air Ceylon.

². *The Forgotten Giant of Australian Aviation, ANA*, Peter Yule, 2001

ANA owned twelve Douglas DC-4s, the first of which was the fleet flagship VH-ANA *Amana*, delivered in 1946. Images of the *Amana* featured predominantly in ANA advertising from 1946 to 1950.

Enter . . . THE AIR AGE Once the dream of visionaries. . . With the importation of the giant new Douglas D.C.4 'Skymasters' embodying all the scientific advancements made during the urgent war years, and the early addition of many more Douglas D.C.3 'Skyliners' to the existing A.N.A. fleet, Australia, through A.N.A., embarks on the air age that will soon establish services 'On The Hour Every Hour' to the main capital cities . . . eventually bringing every town in Australia within eight hours of its State capital . . . provide speedy air freighting services that cannot be equalled - by any form of surface transport . . . and bring the luxury of air travel within the reach of all. WING YOUR WAY WITH ANA

The Mirror 23 March 1946

The DC-4 had long-range capabilities and for the first time it was possible to fly Adelaide/Perth non-stop. The aircraft, with 44 passenger berths was wide and spacious, comfortable even if cabins were unpressurised. In 1946, the *Amana* flew Perth to Melbourne in 6 hours 16 mins (at an average speed of 285 mph) setting an Australian record for a commercial plane and a world record for a Skymaster aircraft. The aircraft set further records on its Australian and New Zealand routes.

The Crash of *Amana*

On 26 June 1950, the *Amana* departed from Guildford Aerodrome for an eight-hour flight to Adelaide. It crashed 18 minutes after take-off, 28 nautical miles (59 km) from Guildford Aerodrome. All five crew and 23 of the 24 passengers were killed. The sole survivor died of his injuries several days later in hospital. At the time, this was Australia's worst aviation accident.

An investigation and inquiry were held into the crash. The Department of Civil Aviation accident investigation team determined that the flight crew had shut down the number four engine and the remaining three engines had subsequently all failed for indeterminate periods. Additionally the aircraft had commenced a left turn, apparently returning to Guildford. The Air Court of Inquiry chaired by Mr Justice WB Simpson could not determine the cause of the accident.

Although the *Amana* was the last fatal crash involving ANA aircraft, the disaster had a negative effect on the reputation and public image of the airline. Along with management problems and the failure to secure Commonwealth contracts and subsidies the airline's operations declined. Ansett Airways Ltd bought out ANA in 1957 and the last DC-4 service by the merged Ansett-ANA was in December 1970.

The Memorial

The *Amana* crashed in a heavily timbered area on the Inkpen family property *Berry Brow*. Most of the aircraft parts were damaged by fire. Crash investigators collected and removed the propellers and all four engines and their components for examination by Department Aircraft Surveyors.³

³ Macarthur Job, *Air Crash* Vol. 2, 1992.

The former owner of the crash site Mr Geoff Inkpen and later Mr Barton reported problems with people trespassing on the property to souvenir parts of the crashed aircraft. At some stage the crash site was covered over by a bulldozer to prevent this. Some crash parts later became exposed after weather events.

This landing gear was salvaged from the property of the crash site in 1992 and offered to the Museum. The Beverley Tourism Development Committee arranged for it to be modified as a memorial and contracted Sleep's Fabrication in Beverley to manufacture the metal mount for the landing gear. It was installed in front of the museum in 2001. Each year on the anniversary of the crash, the Beverley Garden Group places a basket of 29 roses – one for each victim – at the memorial.



Roma Paton, Anniversary Service



Amana Crash Anniversary Service, 2001

Provenance

- Museum archives includes numerous national newspaper and journal articles, published histories, documentation about the aircraft and the crash.
- Correspondence from Belinda Foster, Secretary/Treasurer of Beverley Tourism and Development Association thanking Mrs and Mrs W Barton for the “nosewheel housing from the Amana” and requesting any information about the crash, dated 29 June 1992.
- Invitation, program and list of attendees to the commemorative service on 26 June 2001.
- Correspondence from memorial service attendees and family of victims, telling personal stories and thanking organisers of the service.
- Personal stories and biographies of crew and crash victims, newspaper articles.
- The Air Court of Inquiry, tabled House of Representatives, 28 June 1951.
- Evidence of the crash investigation, National Archives of Australia.

Donor's, owner's and community recollections

The consultant had discussions with Kath Ferguson who located and secured the donation of the landing gear, and Roma Paton who coordinated the 51st anniversary memorial service in 2001. Families of crash victims, rescuers and locals attended the service and Mrs Paton noted their stories, saying she “felt morally obliged to record them. David Paton

researched and curated the museum display about the crash.

The memorial as a piece of the crashed aircraft is indicative of its make and era. This monument is important to the families, friends and colleagues of the crash victims, to local people and others who remember the event and as a record of a disaster. It provides a site for commemorative services. The memorial complements the interpretive display in the museum. Family members, colleagues and others visit the memorial and the museum, and have donated items for the collection.

Context of Use

The memorial relates to broader, Australian history, of what remains the nation's equal worst civil air accident. It commemorates individuals – crew and passengers from across Australia – and a disaster event of national importance. This was a time where interstate air travel was becoming more affordable and common, evident by the mixed backgrounds of the crash victims.

Monuments and memorials reflect practices and rituals of commemoration. Numerous memorials – to civil, military, emergency services and aviation disasters – are found across Australia. These include cairns and monuments with plaques, honour rolls, signage, statues, town clock and gardens, and - like this - mounted on aircraft parts salvaged from a crash. The memorials are located near the crash sites or nearby towns and identify the crash site and date and acknowledge the victims.

This memorial has a relationship with the *Amana* crash site and the people who died there. There is no memorial at the crash site, 19 km north-west of York. The Beverley memorial has become a place of commemoration and interpretation.

Fabric and condition of object

The memorial is in fair to good condition. Corrosion is evident including on the plaque bracket causing issue. The silver paint is flaking. The original landing gear was mass-produced by Douglas Aircraft Company and the memorial stand constructed by Trevor Sleep of Sleep Engineering under instructions. The memorial uses a component of a crashed aircraft as monument to the victims and the crash event. It is a one-off design.

Materials include chrome plated and painted cast metal, safety wire, and box iron. Inscriptions and stamps include the text on the plaque, and part numbers on the wheel rims.

There are signs of wear and tear on the aircraft parts through use in its working life, the crash and subsequent fire. There are no tyres on the wheel rims. Kath Ferguson recalled that Barry Ferguson cut off the axle (left side) with an oxyacetylene torch before the landing gear was restored. The commemorative plaque was originally installed at ground level and dedicated at the 2001 anniversary service. In 2002, a new plaque with updated information was mounted on the landing gear.

Comparative examples

- The Museum's collections includes photographs, a poem, sketch portrait and trophy related to the crash victims and donated by their families.

- The front wheel, lifting gear and oil tank from the *Amana* wreck is held in Fergie's Collection (Barry and Kath Ferguson's private collection) at Hunt Road, Beverley.
- A monument and mass grave at Karrakatta Cemetery also commemorates the victims of the *Amana* Plane Crash. A large long granite marker is inscribed *In memory of* [lists names] *Died 26th June 1950.*
- The Airways Museum and Civil Aviation Historical Society, Victoria has a display related to the *Amana* crash. Grahame Higgs salvaged items of wreckage including the port undercarriage from the crash site in the early 2000's and donated these to the Museum. Located at Essendon Airport, Melbourne – the *Amana's* intended destination – the Airways Museum held *Amana* Day in 2007, acknowledging the 57th anniversary of the crash. Attendees, from Perth, Adelaide and Brisbane, included members of the family of pilot Captain R.J. Chapple, as well as relatives of passengers who lost their lives in the crash.

Statement of Significance

This is a memorial with commemorative metal plaque acknowledging the victims of the Australian National Airways *Amana* crash in 1950. The memorial was made locally using the aircraft's landing gear recovered from the crash site, and is installed at front of the Museum on Vincent Street, Beverley.

The memorial is historically significant because of its associations with what remains the equal worst crash in Australian civil aviation history. All twenty nine people aboard, many of whom were from interstate, died when the *Amana* crashed near York on 26 June 1950. An investigation and House of Representatives inquiry were held into the crash. Australian National Airways was an important national carrier during the 1930s-1950s and the *Amana* was the well-known and promoted flagship of its fleet.

This memorial is constructed from the metal and chrome painted landing gear from the *Amana*, a Douglas DC-4 aircraft. The memorial is in original, unrestored condition. It is a one-off design utilising a salvaged part of the crashed aircraft. This came into the collection in 1992, was modified and installed at the museum for the 51st anniversary commemorations in 2001. The commemorative plaque was later updated and attached to the landing gear. The form of the memorial is characteristic of monuments to disaster events, and in particular using a component of the crashed aircraft, now less common practice.

Provenance of the crash, the airline and victim biographies, is well documented. The museum archives holds material relating to the anniversary service including photographs, invitations, program and correspondence. There is less documentation about the accession of the salvaged parts and the modification of the landing gear as a memorial.

The memorial is primarily of social and spiritual significance. It is particularly relevant to the families and colleagues of the passengers and crew and has ongoing importance to those people and their descendants. This is demonstrated by attendances at the anniversary event and correspondence from related people. The Beverley community acknowledges the event each year. There is no public memorial at the site of the crash. The memorial's location in this public place demonstrates its importance; it has become a place of commemoration. Importantly, it recognises the people who died and records their names. The memorial is complemented by the Museum's interpretive display about the event. This tells the stories of the victims and features items donated by their families.

The Flying Flea



Description

This is a scale model of a small single-seat bi-plane. It has a front mounted engine and propeller and two large main wheels with two smaller tail wheels.

Specifications

Make and Model	HM.14 <i>Flying Flea</i> model (home-built)
Year of manufacture	1983
Dimensions	Approximately 3.37m long x 1.45m tall and 4m wide
Engine	Briggs and Stratton Model 190432 Type 163701 Code 79112812 (replacement)
Style	Single seat light staggered bi-plane (model)
Marks and Imprints	<ul style="list-style-type: none"> • Engine - Briggs and Stratton logo, Model 190432 Type 163701, Code 791 12812 • Fan belt – 13x1420A56 • Tyre - _WA - - - -? 480/4.00-8 • Oil Filler - OIL • RPM/Rev Counter • Altimeter – 1000 Feet Altitude, <i>Inch of Mercury</i>, stopped at 29.96

History and Provenance

This is a static model of a *Flying Flea* made by John Cork. Mr Cork made a similar aircraft in 1938 and then this model for the museum in 1983. *The Flying Flea* is a staggered wing bi-plane with repurposed engine and fixed landing gear. It is a single-seat open-cockpit aircraft

with two-axis control. The original was used for short flights at low altitudes. The fabric covering the wings is doped. The model includes the propeller from the original made by Mr Cork.

Henri Mignet and *The Flying Flea*

The Flying Flea (named Pou-du-Ciel or "Louse of the Sky" by the press) belongs to a large family of light home-built aircraft. Henri Mignet, a French radio engineer and aircraft maker, designed and made a number of these aircraft between 1920 and 1928. His fourteenth prototype HM.14 was first flown in 1933.

In 1934, Mignet published the plans and building instructions for his monoplane. Translated into English and serialised in *Practical Mechanics* in the USA, he inspired hundreds of amateur builders around the world to build *Flying Fleas*. On 5 December 1935, English pilot Stephen Appleby flew his home-built *Flying Flea* from a Kent airfield to Saint-Inglevert Airfield, the only cross-channel flight of a *Flying Flea* from England to France, until the 1980s.

Early versions of the HM.14 had design flaws, resulting in crashes and pilot deaths. In June 1936, the Australian Civil Aviation Department prohibited *Flying Flea* aircraft types following fatal accidents in England, "awaiting the result of Air Ministry enquiries in Britain".⁴

Full-scale wind tunnel tests by the Royal Aircraft Establishment in the United Kingdom and the French Air Ministry discovered the problem. Later Mignet Flea designs incorporated changes to the airfoil and wing spacing to prevent aerodynamic interference. Henri Mignet and later Mignet Aviation designed more than 300 variants of *The Flying Flea*.

Jack Cork

John 'Jack' Cork, a former pupil of Beverley School, built a *Flying Flea* in 1938, following plans in the book *Le Pou du Ciel* by Henri Mignet. Cork is pictured with the aircraft in 1938.

'FLYING FLEA' BUILT IN BACKYARD

May be Flown Tomorrow

In a backyard at Mt Hawthorn, 23-year-old John Cork has built a "*Flying Flea*" aeroplane at a cost of £15. He hopes to fly it tomorrow.

All the plane has been home built with the exception of its motor cycle engine. The tiny machine is only 13 feet long from the propeller to the tail tip. A desire to learn to fly and to have an interesting hobby, prompted Mr. Cork to build his '*Flying Flea*'.

BUILT FROM BOOK GUIDANCE – He has had no practical experience in aeronautical mechanics, but has built the machine from book specifications. It has taken him five weeks. He found the shaping of the propeller the most tedious work, and it took him a week to make the two wings. The main wing has a span of 20 feet, and has a variable pitch to control the machine in flight. It is supported in the centre on a three-point pylon fastened to the fuselage in front of the cockpit, and when in the air the weight of the machine is carried by two additional struts.

TYRE PROBLEM – Tyres have been the greatest problem, and as soon as satisfactory tyres for the miniature wheels have been devised, the plane will be ready to take the

⁴ *Windsor and Richmond Gazette*, 26 June 1936.

air, says its constructor. The home-made petrol tank has been built into the main wing over the cockpit. Mr. Cork hopes that the 41 h.p. motor cycle engine will give his plane a top speed of 60 miles an hour. The machine, will take off at about 25 miles per hour and land at 20 miles an hour, he estimates. Apart from competing in a flying scholarship in which he came second, Mr. Cork has had little flying experience. But he says: "As long as you can ride a motor bicycle you can fly this plane."

The Daily News, 28 May 1938

Cork described the trial flights at Lake Pinjar near Wanneroo:

The Flea flew quite successfully in trials at very low altitudes, some 3 to 10 feet, but finally attempted a cross-wind landing and was tipped on its side, damaging the front wing main box spar.

Notes from Jack Cork, BAM display text, c1983

The damaged aircraft was never repaired because Cork left for the UK in 1939 to enlist. The engine was removed and the aircraft placed in storage where the fuselage and wings later "disintegrated". Cork worked in an aircraft factory in Kent, and then joined the Royal Air Force (RAF) in 1940, serving with the Number 115 Squadron as a rear gunner during World War II. He achieved the rank of sergeant and was awarded the Distinguished Flying Medal in 1941.⁵

Mr Cork visited the Museum in 1982 and was motivated to make a model of his *Flying Flea*. He constructed and delivered the model the following year, donating it to the collection where it was displayed. The aircraft was removed from the Museum in 1996 and disassembled. In 2000-2001, Aviation Heritage Museum (AHM) volunteers replaced the missing wing struts and engine and reconstructed the aircraft. Frank Matthews, of the BAM, rebuilt the wings in 2001.



Returning the Flying Flea to the collection, 2001

Provenance includes correspondence between John Cork and the Shire of Beverley (18 November 1982 -21 June 1983) including notes provided by Mr Cork about the construction of the original aircraft and its model. The museum display features a photograph of Jack Cork in RAF uniform and his notes about *The Flying Flea*. Museum archives include correspondence from Roma Paton, BT&DA Secretary, 2001 to AHM thanking the museum for the restoration work. The consultant has also located various newspaper articles about Mr Cork's 1938 *Flying Flea* and his DCM award.

⁵ *The West Australian*, Friday 22 August 1941

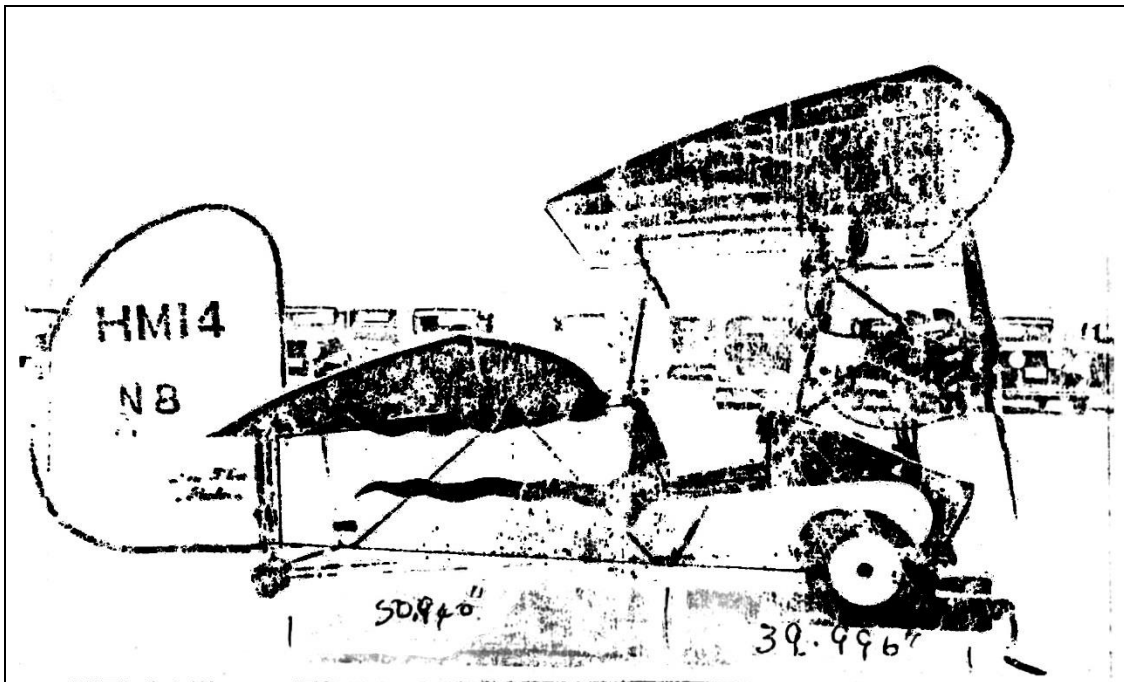
Donor's, owner's and community recollections

The consultant contacted John Park, Curator Aviation Heritage Museum, Bull Creek, Frank Matthews who repaired the wings, Roma Paton and Belinda Foster, formerly Secretary/Treasurer of BT&DA.

The donor described how he made the model referring to a photograph (*see below*) of the HM.14 Flying Flea from an unnamed book.

“The original book with the sketches and sizes I used for the original Flea before the war has disappeared long since. From one size I do recall – the length of the lower [arm-rest] of the cockpit (16”) – I measured and scaled up the other measurements with the help of calculator [and] micro-calipers.”

Correspondence John Cork to Shire Clerk, Shire of Beverley, 22 November 1982



John Cork's working plans, Shire of Beverley archives

“Using only that measurement, I had a photo of a Flea blown up and took all the measurements from scale. I ended up with almost three pages of measurements all from the 16” arm-rest”.

While the model donated could not fly, this was only because the size of the engine, approximately 150cc.'s was not the size specified in the plans. Mr Cork said had he been able to find the right size engine, there was no doubt the model would fly.

Flea Flies into Beverley, Beverley York Express, 23 June 1983, page 5

The original design of this ultra-light machine featured a single cylinder motor cycle engine of some 350c.c. capacity.

Correspondence from John Cork to the Shire Clerk, Shire of Beverley, 22 November 1982

Context of Use

Mignet designed *The Flying Flea* to appeal to amateur aviators and hobby builders of little flying experience. It was “easy to make without excessive skills or special tools”⁶. Mignet claimed that any man who could nail shut a wooden crate could build his own HM.14 and be able to construct his machine in a 13 foot (4 metre) room.

Each *Flying Flea* was unique, determined by availability and choice of materials and components such as the engine, as well as the skills of the maker. The materials including plywood, mild steel, cable, glue, fabric and glider dope were easily available and affordable for most. Mr Cork estimated that his original aircraft cost £15 to make and the model \$400, the most costly component being the timber.

Careful buying should give the constructor a list of materials for about 25 francs excluding the engine and proprietary articles.

HM.14 The Story, Aviation for the Amateur, The Flying Flea (“Le Pou-du-Ciel”) How to Build it and Fly it, 1935

Mignet’s book and plans are available online, at the time of writing. Various other makes of aircraft kits, plans, parts, and supplies for amateur construction are now widely commercially available, some based on Mignet’s design principles. In Australia, amateur built aircraft are regulated by the Civil Aviation Regulations. As of 2016, there are currently more than 100 different models of aircraft across the Australian amateur built fleet.⁷ With developments in design and technology, construction materials such as wood, fabric and metal tubing have been replaced by metal and composite materials

Fabric and condition of object

This is a handmade model with manufactured mass produced engine, wheels and instruments. The aircraft is constructed from plywood, rubber, metal, timber, fabric and staples. There are no inscriptions or labels on the airframe. Part numbers and brand stamps can be seen on the manufactured parts repurposed for the model. The wooden hand-made propeller, recovered from Cork’s original aircraft is painted yellow and black. The sized fabric over the wings and the fuselage is painted silver. The engine and components have been painted in black enamel.

The aircraft was loaned to the Aviation Heritage Museum in the mid-1990s. Belinda Foster recalled that AHM volunteers made some repairs to the aircraft including replacing the wing struts with dowel rods and installing another engine. In 2001, Frank Matthews, curator and volunteer at BAM, repaired the wings covering them with fabric (possibly calico) and sizing this with silver paint.

The aircraft is in good condition and stored inside the museum in the central, roped-off area. There are a small number of tears and patched tears in the sized material. Dust has accumulated and adhered to the horizontal parts. The screws fixing the tubing of the central wing/engine support to the fuselage are loose and lifting. Some metal parts (altimeter and rev counter) are showing signs of use and wear from its working life (for example, flaked paint, faded numerals, condensation). It is not known if the engine is operational.

⁶ *HM.14 The Story, Aviation for the Amateur, The Flying Flea (“Le Pou-du-Ciel”) How to Build it and Fly it, 1935.*

⁷ *Amateur built and experimental aircraft*, www.casa.gov.au/operations/standard-page/amateur-built-and-experimental-aircraft, cited January 2016

The Flying Flea was of simple but unconventional design. It had no ailerons, elevator or rudder pedals. Mignet's design used two main wings, one mounted above the fuselage, ahead of the pilot. The pilot pivoted this wing by moving a control stick back and forward for vertical control. The second wing was fixed to the top of the fuselage behind the pilot. To turn, the pilot swung the control stick left or right to move the large rudder.

This aircraft belongs to a group of experimental amateur built aircraft constructed since the beginning of aviation. The Flying Fleas are successfully flown and enthusiasts hold annual meetings and demonstrations of the aircraft around the world.

Comparative examples

The museum display includes two photographs of another Flying Flea in the back garden of Mr Bill Langton, Mount Hawthorn in 1938/39. The Museum's collection includes other home-built aircraft *The Flying Plank* glider and *The Grasshopper*, made for the 1977 Birdman Rally at Yanchep, WA. The *Silver Centenary*, previously in the collection and featured in the current display is a fine example of a home-built aircraft.

Many Flying Fleas of various models were constructed and a number of original and replicas are held in museum and private collections including state and national institutions around the world. Mignet's HM.14 model can be seen in the following collections, for example:

Queensland Aviation Museum

Flying Flea Light Aircraft - Avions Henri Mignet HM.14 built by members of the Roberts family of Ipswich in 1935. After one unofficial test it was stored under the Roberts' home until they donated it to the Queensland Museum in 1982. Made predominantly from plywood and canvas, the plane is powered by a 23 horsepower (17 kW) four cylinder in-line Henderson motorcycle engine.

Smithsonian National Air and Space Museum

Mignet-Crosley Pou du Ciel is the first HM.14 made and flown in the United States. Edward Nirmaier and two other men built the airplane in 1935 for Powel Crosley, Jr. president of the Crosley Radio Corporation. After several flights, a crash at the Miami Air Races in December 1935 grounded the Crosley HM.14 for good. In 1960 Patrick Packard donated the Pou du Ciel to the Smithsonian. Restoration was completed in 1987.

Statement of Significance

This is a model of a single seat staggered-wing bi-plane made of plywood, timber, fabric and metal with repurposed engine and commercially produced wheels. The aircraft is small, measuring approximately 3.37m long x 1.45m tall with a wingspan of 4 metres.

This aircraft belongs to a group of experimental amateur built aircraft, the first of a family collectively known as *Flying Fleas*. Designed by Frenchman Henri Mignet, the first Pou-du-Ciel (Louse of the Sky or *Flying Flea*) flew in 1933. He designed *The Flying Flea* to be simple and affordable to build, publishing plans and instruction for the HM.14 in 1934. Translated and made available internationally, these inspired amateur aviators and hobbyists to make and fly their own aircraft.

Jack Cork, formerly of Beverley, built and flew a HM.14 in 1938. He made this model for the museum in 1983. It is historically significant as a copy made by Mr Cork of the HM.14 he built and flew in 1938, inspired by Henri Mignet. It also has local significance because of Mr Cork's connection to Beverley and as an example of a Western Australian built HM.14.

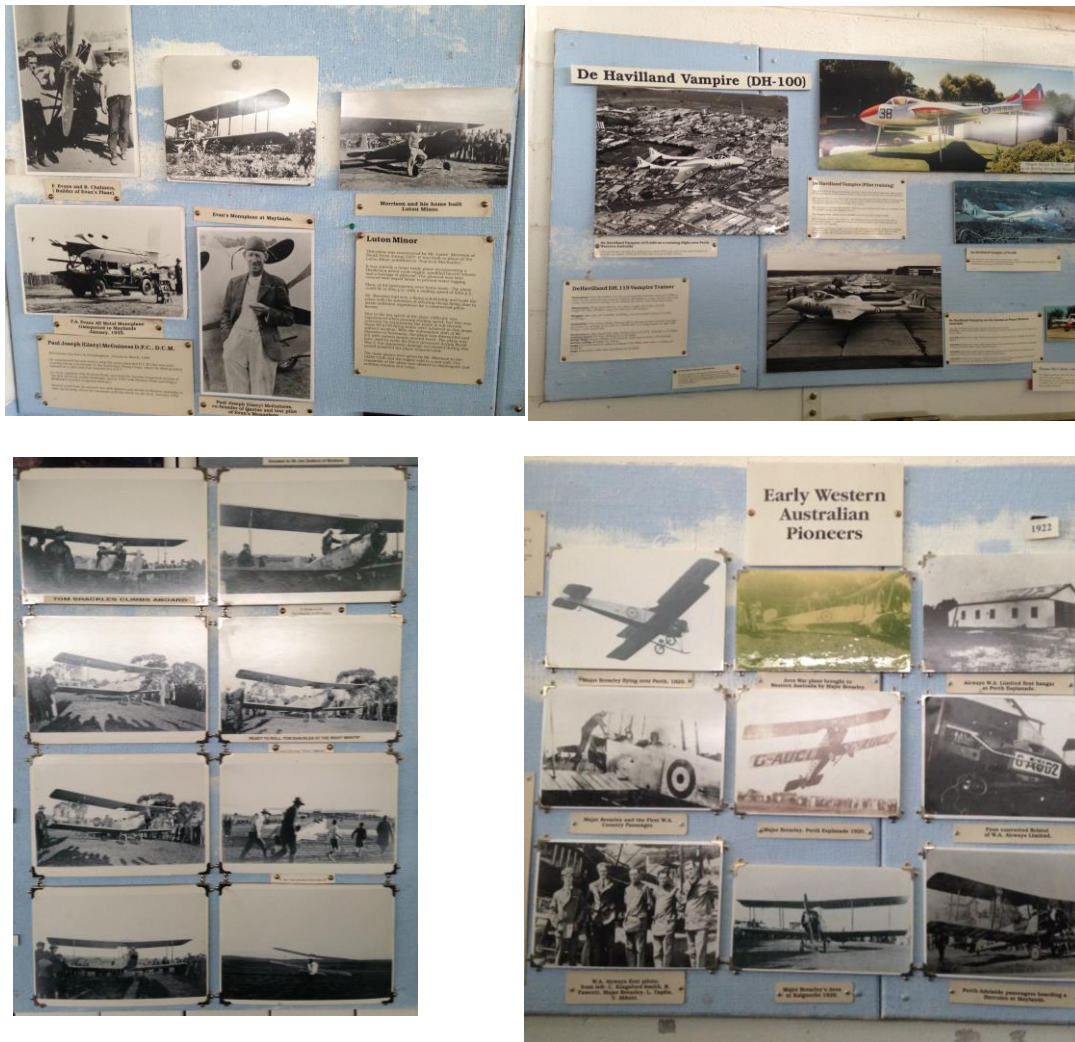
The condition of the aircraft is good. During the 1990s it was disassembled then loaned to the Aviation Heritage Museum at Bullcreek. AHM and BAM volunteers restored the aircraft, replacing the engine and wing struts, by 2001. It is located in the central display space of the museum.

The aircraft has moderate aesthetic significance for its design. It is of simple but unconventional design where the joy stick provided directional control and the upper wing pivoted for vertical control. The aircraft is painted silver except the propeller – the one remaining component from Mr Cork's original aircraft – which is painted yellow and black. The aircraft is in good condition.

Provenance is well documented including a working drawing and historical notes provided by Mr Cork. Shire archives include correspondence with Mr Cork about the donation and the story of his original aircraft and the making of the model are recorded in state newspapers.

The Flying Flea has high interpretive potential. It gives insight into a time of experimental aircraft design and production and risk-taking by pilots. *The Flying Flea* design has remained popular, and enthusiasts have continued to successfully build and fly their own aircraft. The aircraft is highly relevant to the museum collection as a model of a home built aircraft, early aviation and its associations with Henri Mignet's design. It complements other home-built aircraft in the collection.

Photographic and Image Collection



Description

A collection of approximately 170 reproduced photographs and prints of civil and military aviation events, aircraft and identities of the early to mid-twentieth century

History and Provenance

This is a large collection of mostly copied photographs and paper-based images. The collection was compiled and/or collected by Shire staff, museum curators and volunteers or donated by community members, families, and aviation interest groups. The collection generally covers Western Australian aviation history in the twentieth century and is displayed chronologically and by theme. The photographs are monochromatic and colour format.

There are few accession documents relating to the photographic collection. It is understood by the consultant that the first photographs in the collection were collated in 1967 by the state's Tourist Development Authority which also contributed funds towards establishing the museum.

A very large collection of historic photographs covering the beginnings of world aviation ... and depicting the story of Australian aviation together with explanatory captions adorn the walls.

The Beverley Times, 13 October 1967

The Tourist Development Authority collected a considerable amount of history pertaining to the growth of aviation in W.A. and throughout the world, with particular reference to our own "*Silver Centenary*."

The Beverley Times, 20 October 1967, page 1

Later, former Shire Chief Executive Officer Keith Byers and Deputy Ian Nicholson updated the collection (possibly in the 1980s/pre-1996) as the photographs and/or mounts had sustained insect damage. Messrs Byers and Nicholson spent some days in the Battye Library locating suitable photographs on the subject of WA aviation history. Copies were made from negatives and mounted for display.

These photographs were later copied. Roma Paton, former BAM volunteer and BD&TA secretary, recalled:

"In 1999 and into the first months of 2000, my husband David, I believe, photographed all of the displayed photos and sent the films to [photographer] Geoff McKenzie in Kalgoorlie who processed them and 'cleaned up the images', printed them and sent them back. David and I laminated the photos and mounted them on core boards. David and I painted the walls of the museum blue with clouds as a background for the display. This was done in preparation for the 2000 Air Show".

Email correspondence with Michelle Slarke, January 2016

David Paton curated the new display, researching and writing the display text and captions. He had previously proposed a display about the Vampire jets and the Beverley Gliding Club, and this was possibly added around that time. Mrs Paton said that some photographs of the *Silver Centenary*, Selby Ford, Tom Shackles and others were donated by those families and locals in 1999 and early 2000.

Other images including photographs, photocopies, printed newspaper articles, framed prints and drawings have been added to the display since. The mounted photographs range in size from 150mm H by 100mm W to 450mm H by 600mm W. The common size is 200mm H by 300mm W. Most photographs have captions and small interpretive panels. These are mostly the only record of the photographs' provenance.

It would be timely to scan and digitally archive these photographs before further deterioration. This is not ideal as the photographs were copied from prints and laminated, however the photographs relating to the *Silver Centenary* are particularly significant and important to preserve as it may be difficult to locate and collate this collection again. It may be possible to source digital copies of the photographs that came from the State Library of WA and the Western Australian Tourism Commission collections however this could only be progressed if and when provenance is known.

Donor's, owner's and community recollections

The consultant spoke with former shire staff (Des Cunningham, Keith Byers and Ian Nicholson) and museum volunteers (Roma Paton, Belinda Foster, Kath Ferguson) who compiled or updated the collections, and the State Library of Western Australia staff.

Some of the photographs appear to be taken by professional photographers, probably for newspaper publication and commercial purpose. Other photos were donated by families or visitors to the museum. The collection was added to as photographs were sourced. Accession documentation has not been located for the photographs. Shire staff and volunteers have been unable to locate prints and/or of those copied.

Context of Use

The photographs document important events, places and people of early West Australian and Australian aviation history. They show historic scenes and aircraft that have now gone. Many include people – pilots in flying garb, aircraft workers and spectators.

The photographs complement the collection items. The displays are set out mostly in chronological order, left to right as one moves around the room, and in the following general themes:

- *Silver Centenary* - The Plane, The Builder, First Trials, Flights, Restrictions
- The Amana Memorial (and crash)
- First Flight in the World, Pearse monoplane print
- Australian pioneers – JJ Hammond at Belmont, 1911; Arthur W Jones, Perth Oval, 1914
- Blackburn Beverley, UK
- First attempts at Aircraft Construction
- The Young Eagles of Kalgoorlie
- Notable events and Personalities – Galway Aircraft, Evans Monoplane, Luton Minor
- First attempts at aircraft construction
- De Havilland Vampire (DH-100) trainer
- Macchi jets, training the pilots
- North west Aerial Service
- Perth-Adelaide Service
- Early Western Australian Pioneers – Major Norman Brearley; WA Airways
- Aero Clubs in Western Australia including the Beverley Soaring Society
- Charles Kingsford Smith
- Royal Australian Air Force and Pearce Base
- The Flying Plank
- Home Built Aircraft in Western Australia – the Albany Plane, 1913, The Kalgoorlie, the Galway aircraft, The Blanche Aircraft, Evans Monoplane, The Luton Minor

Paper Items

- Spirit of Beverley, Twin-Astir, framed photo
- *Into the Sun, Southern Cross; Early Days, Qantas DC3; Heading North, Catalina Flying Boat; Carrying the Mail, The Royal Mail Service* framed paintings by John Bradley
- Significant Events in West Australian Aviation History – framed poster map with events, produced by Aviation Heritage Museum
- TAA map of Australia
- USS Akron Airship, United States Navy, laminated and framed prints
- Technical Manuals/ Profession library (James Dean, TAA engineer)
- Australian Aviation magazines (Peter Garnett donor)
- RAAF certificate of Service and Discharge , Herbert Bedford Blythe, framed document dated 1946 (Lorraine Smith donor)
- WWII memorabilia (file) RNZA
- 93 Squadron RAAF Frank Ford album
- Beverley Air Show (x3) & Aviat70 (x1) posters

The consultant reviewed other digital collections to locate original images and their photographers (below). This requires further investigation, of wider provenance including reproduction permissions for the images.

Ernest Lund Mitchell was born in the United Kingdom in 1876, and migrated to Australia in 1899. He became a press photographer for the Western Mail, and set up his own photographic studio in Perth circa 1910. He was a Commissioned Photographer for private individuals, commercial institutions and numerous Government departments. The State Library of Western Australia holds a large collection of his photographs.

The copy of Mitchell's photograph in the BAM collection records a demonstration flight at Belmont Racecourse by New Zealand aviator Joseph Hammond on 3 January 1911. Hammond made the first significant aeroplane flight in Australia (lasting 45 minutes) from Belmont Racecourse, on 9 January 1911 in a Bristol Box kite. The original image was printed from a black and white glass negative.

Unknown Photographer, *Preparing to start Australia's first scheduled airline service. Norman Brearley and his pilots in front of a Bristol Tourer at Langley Park, 4 December 1921.* The original was a black and white photographic print from the Weekend News Flashback series. The photograph was taken on 4 December 1921, when the three Bristol Tourers flew from Langley Park, to Geraldton, in preparation for the first airline service the next day between Geraldton and Derby. Photographs shows Charles Kingsford Smith, Robert Fawcett (killed the next day on the first flight) Norman Brearley, Len Taplin and Val Abbott (later to be the Attorney General).

Fabric and condition of object

The collection includes copies and reprints of mostly twentieth century photographs. The photographic collection is displayed across 12 hessian covered panels 910mm high that are mounted on all walls. The hessian has been painted to represent sky and clouds.

Materials include paper, inks and toners and card stock. Most paper based photographs are mounted on card or foam core with Velcro or metal brackets and screws. The prints are of different qualities and development processes. For example, printed directly from negative to photographic paper or re-photographed and printed from negative. Other images are photocopied onto 20g copy paper. Most are plastic laminated and mounted. Some images are framed (different materials and format) and others directly printed from internet pages.

Various people have added to the display at different stages and where space has been available. This has made the interpretation inconsistent, sometimes repetitive and disrupted the chronologic order and themes of the display information.

Condition (as reproductions) is fair. There is fading and discolouration evident and some prints are cockled and lifting from their supports, and/or showing insect damage. Photographs have been attached with drawing pins to the hessian covered boards or attached to or leaning on walls, aircraft and objects. They are exposed to the light and without climate control. The restoration was organised by Museum volunteers David Paton (interpretation, captions and photographs) and later John van Tiel (restoration and mounting).

Comparative examples

- State Library of Western Australia collection including the Western Australian Tourism Commission collection of photographs

- Aviation Heritage Museum – military aviation collection

Statement of Significance

On the walls of the museum is a large display of mostly copied photographs and prints accompanied by historical material prepared by museum volunteers. There are over 150 mounted photographs, predominantly monochromatic, plus images including prints, sketches and paintings. This assessment does not include loose photographs in various scrap books and albums

The collection includes copies and reprints of mostly twentieth century photographs and images. The collection is displayed on painted hessian covered panels mounted on all walls, set out thematically and mostly in chronological order. Interpretation design has become inconsistent and crowded.

The subject matter of the photographic collection, while not comprehensive, is of historical significance, depicting aspects of West Australian aviation history during the early twentieth century. The photographs have traceable links to civil and military aviation events, identities and aircraft. The subject matter is engaging however needs to be reviewed and updated. The most significant items in the pictorial collection include those that:

- tell the story of the *Silver Centenary*, Selby Ford and Tom Shackles
- relate to and help interpret objects in the collection such as the de Havilland Vampire jets, *The Flying Flea* and the Amana Memorial
- Represent West Australia aviation history

The condition of the collection is fair. These are prints and reproductions of copied images and most have been plastic laminated and mounted. Few donors and photographers are recorded and there is little accession documentation. The interpretive text prepared by museum staff and volunteers is often the only record of provenance.

The Western Australian Tourism Authority, Shire of Beverley staff and museum curators have collated the collection. It has been reviewed a number of times and it is not clear what remains from the initial collection. It is probable that some of the photographs were sourced from the State Library of Western Australia and the Western Australian Tourism Commission collections. It appears most of the *Silver Centenary* photos were loaned for copying by the Ford and Shackles families and local people. There is potential for further investigation into provenance.

There are many stories to be told through this collection. The research and interpretive potential of the collection is moderate but reduced by reproduction methods and little provenance. The photographs relating to the *Silver Centenary* are of moderate local and state significance however this would be greater with better provenance and reproduction.

The collection gives insight into Western Australian and Australian aviation in the early to mid-twentieth century. Importantly it depicts the story of the *Silver Centenary* for which the museum was built and Selby Ford whom it commemorates. The collection is an important component of the wider museum collection providing interpretation and context in aviation history.

De Havilland Vampire T.Mk 35 A79-638

Outside Museum, Vincent Street, Beverley



De Havilland Vampire T.35 airframe



Vampire instrument panel

Description

Airframe and parts of de Havilland DH.115 Vampire T.35, a two-seat advanced and weapons training aircraft.

Specifications

Make and Model	De Havilland DH.115 Vampire T.35
Year of manufacture	Mid-late 1950's
Serial Number	A79-638
Dimensions	Approx. 10 metres L x 12 metres W (wingspan) Frame 2.26m at tallest point
Construction Number	4160
Aircraft Type	T.35
Engine	Goblin, engine number 16663 (removed prior to accession)
Style	Single engine, two seat training jet of twin boomed configuration
Marks and Imprints	<p>Painted grey/silver with orange on wing tips and nose (upper half) A79-638 lettering, RAAF colours and roundel</p> <p>Metal plaque, installed (<i>text below</i>) DE HAVILLAND VAMPIRE JET DH-100</p> <p>The Vampire Mark 1 made its maiden flight on 20 September 1943 when it flew from the grass airstrip at Hatfield, UK.</p> <p>Initial Design: Designed during World War 11 Unusual twin boom layout Goblin engine with thrust of 1400kg</p> <p>Australian Design: 80 Nene Vampires were produced from 1949 to 1953 Rolls Royce Nene engine with thrust of 2040kg</p> <p>Performance: Maximum speed of 882km/h at 30,000ft Initial climb 1,371m per minute Service ceiling 13,100m Range, 1,266km</p> <p>Armaments: 4 Hispano MK5 20mm canons mounted on the lower forward fuselage.</p> <p>The Vampire entered the Royal Australian Air Force Squadron service in April 1946. It was the second jet aircraft in service with the RAAF</p> <p>The Vampire outside the museum was purchased by the Shire from the RAAF for 50 pounds (\$100)</p> <p>The Vampire on Hunt Road was offered to the Shire at no cost, provided the Shire was able to relocate it from the Geraldton area.</p>

History and Provenance

The aircraft was mass produced by de Havilland Australia, at its workshop at Bankstown for the Royal Australian Air Force. It was delivered new to Number 2 Aircraft Depot (2AD) at RAAF Richmond NSW from de Havilland on 23 March 1959.

The A79-638 was transferred to 81 Wing, RAAF base Williamtown, New South Wales on 27 February 1961 and then on 20 March 1962 to Central Flying School at East Sale, Victoria where it was in service until March 1968. RAAF used the aircraft as a training jet for advanced pilots. The Vampire was placed in storage at RAAF Base Pearce in August 1968 and approved for disposal in January 1970.

De Havilland Aircraft

Geoffrey de Havilland established de Havilland Aircraft Company Limited in late 1920 in Edgware, England. Operations were later moved to Hatfield, Hertfordshire. The de Havilland Aircraft Company developed a number of important aircraft in the 1920s and 1930s including the Moth biplane and the Mosquito light bomber for the Royal Air Force (RAF) and the pioneering passenger jet service Comet.

De Havilland Aircraft Company established de Havilland Aircraft (DHA) in Melbourne in 1927, their first subsidiary outside the United Kingdom. In 1930 DHA relocated to Mascot aerodrome in Sydney. During the 1930s and 1940s DHA assembled and/or manufactured Tiger Moths, DH.84 Dragons and DH.98 Mosquitos for the Royal Australian Air Force (RAAF). In 1943 the company established a plant at Bankstown, New South Wales. In 1960 de Havilland became Hawker de Havilland Australia Pty Ltd as part of the Hawker Siddeley group and in the 1980s changed its name to Hawker de Havilland Limited. Boeing purchased the company in 2000, re-naming it Hawker de Havilland Aerospace Pty Ltd.

The Vampires

De Havilland developed the Vampire in its UK factory at the end of World War II however the aircraft was not used for combat in that arena. It was a single-engine jet fighter, a design made possible due to the development of more powerful engines. The aircraft set many aviation records, being the first RAF fighter with a top speed exceeding 500mph, and the first jet aircraft to land on and take off from an aircraft carrier.

Between 1943 and 1961, de Havilland built 3,987 Vampires – in 15 versions – in Australia and five other countries. At their Bankstown workshop, de Havilland built 80 single seat aircraft, powered by Rolls Royce Nene engines under licence to the Commonwealth Aircraft Corporation. These were the first jet-propelled fighter aircraft built in Australia. The first Australian built Vampire flew in June 1949.

Variants

Between 1949 and 1960, de Havilland built 192 of the A79 type Vampires, (Mk. 30/31/33/34/35) for the RAAF. Developed initially as a single-seat fighter bomber, the DH.115 dual-seat version was introduced in 1951 to train pilots. Sixty eight T.35's, a modified version, were built in Australia. The Australian built twin-seat Vampire trainers T.33, T35, T35A retained the de Havilland Goblin engine. Single seat Vampires were retired in the RAAF in 1954.

This airframe is associated with RAAF base East Sale, home to Central Flying School. The first Mk. T. 35 model trainers entered service in September 1957. The Central Flying School at East Sale also operated the Vampire to train RAAF flying instructors. Other RAAF units

that used the two-seat Vampires include No. 2 Fighter Operational Conversion Unit at RAAF Base Williamtown, NSW, RAAF Base Point Cook and RAAF Base Pearce. A number also served with No.5 Operational Training Unit, Williamtown.

The RAAF phased out the Vampires from the late 1960s and most were decommissioned by 1970. Hawker de Havilland at Perth Airport was commissioned to dismantle the Vampires for disposal. A number were acquired and installed at museums, aviation sites and other locations around Perth as landmarks and for promotional signage. Many found their way to Perth scrap dealers and were salvaged for metal.

By 1969 the Shire of Beverley Council was seeking a decommissioned Vampire jet as another aeronautical attraction for the Museum. The Shire acquired the Vampire jet airframe from the RAAF by tender process in 1970.

The frame was purchased from Pearce for \$250 and it arrived by truck on Tuesday morning after a two-day trip from Pearce — a stop being made overnight at Toodyay. The jet has a 40-ft. wingspan and looks very spic and span as a result of recent attention from Flying Officer David McKeand.

Vampire Air Frame Arrives, The Beverley Times, Friday 19 June 1970

Council proposed to display the jet in front of the Civic Centre however after community feedback and letters to *The Beverley Times*, decided to install it at its present location. A plaque was later installed here and at the Vampire at Hunt Road, Beverley. (The plaque states the A79-638 was purchased for £50 however the airframe was purchased in 1970 after the introduction of decimal currency)

Provenance includes the *Aircraft and Marine Craft – Record Card* from RAAF (1959 -1970) listing maintenance in the aircraft's working life including services at de Havilland, Bankstown; Shire of Beverley correspondence regarding surplus Vampire jet parts (November 1990); notes by David Paton, photographs, published references and various articles from *The Beverley Times*. The Vampire can be seen installed outside the museum in June 1971 on www.goodall.com.au.

Donor's, owner's and community recollections

The consultant had discussion with former shire staff Keith Byers, Ian Nicholson and Des Cunningham and museum volunteer Roma Paton who was involved in the museum in the late 1990s and early 2000s. Roz Turner, Unit Histories Officer, A/Senior Historical Officer, Office of Air Force History, Canberra provided records for the museum's Vampire from the RAAF archives. Other sources include:

- Aviation Heritage Museum, Bull Creek
- RAAF Base Pearce
- Martin Edwards, ADF serials

Context of Use

The Vampire is one a fleet of military training aircraft manufactured and/or operated in Australia for air defence. The aircraft was used at the RAAF's flying schools in the employment of instructors and training of RAAF pilots following their basic training.

Going solo in the Vampire was a huge thrill. Although cramped and uncomfortable, the Vampire was exciting to fly.

A Flier's Life, Gareth Kimberley, 1991

This aircraft belongs to a group post-World War II fighter jets. By 1950, the RAAF fleet comprised Vampire and Mustang fighters, Lincoln bombers, Dakota transports, Catalina flying boats, Mosquito survey aircraft and other aircraft including Tiger Moths and

Wirraways. Pilots previously trained on Tiger Moth bi-planes and Wirraways, followed by the Winjeel, a three seat training aircraft. The Vampire in contrast was sleek, fast, agile and reliable⁸. The Vampire represents the transition between these aircraft and the larger, more powerful Macchi MB-326H jets that superseded it in the late 1960s.

The Vampire was the first jet aircraft made for the RAAF. The pilot was seated well forward in the central nacelle beneath a bubble canopy, and had an excellent field of view. The training instructor sat beside the pilot. Later models had an ejection seat.

Fabric and condition of object

The aircraft has a twin boom configuration with the cockpit and engine located in a short, centralised nacelle. This reduced the length of intake and outlet ducting. It had a single turbojet engine which exhausted out of the rear of the nacelle through a ring.

The tail is carried by two slender booms. These extend from mid-chord on the monoplane wings which are set midway along the sides of the fuselage. Each boom holds a small vertical tail fin and is connected at the (aft) tail end by a large horizontal stabiliser. The jet armament was four 20 millimetre Hispano cannon fitted to the underside of the forward fuselage. Additional ordinance (or drop fuel tanks) could be carried under the wings. The jet had a tricycle undercarriage.

The cockpit/engine nacelle structure was constructed using a plywood-balsa-plywood sandwich method. The fuselage was built in two halves, fitted out in construction and then joined along the central line. The wings, tail surfaces and booms were made of aluminium.

The Vampire A79-638 is mounted on a metal framework (2.26m tall) installed on a concrete pad outside the museum. Materials include fibreglass, timber, metal and canvas. The airframe is in fair condition for display purposes. The wind shield has been cracked at some point. Some of the body work is crumpled and dented, probably incurred during freighting, storage and/or installation. The fuselage timber is showing rot, and the paintwork is flaking and cracked. There is some surface rust on the undercarriage and the installed support frame. Some of the bodywork has been patched and silicone used in attempt to weatherproof the airframe. It is not known who completed this work. The airframe has been displayed in the open since it came into the collection.

The fuselage and wings are painted grey/silver, and the wing tips and nose orange. A79-638 lettering is hand-painted on both booms. The red, white and blue RAAF colours are displayed on both sides of tail fins and the RAAF roundel (with Red Kangaroo 'in motion' introduced in July 1956) can be seen under the wings and on the booms. The airframe has been painted two or three times since installation – by David Paton for the Beverley Air Show of 2000 and Dennis Watts in 2012.

⁸ Canada Aviation and Space Museum, www.casmuseum.techno-science.ca



*David Paton painting Vampire for
Beverley Air Show, 2000*



After completion

The Vampire is non-operational and most interior parts, the landing gear, nosewheel, and drop tanks have been removed. Both navigational lights on wings are missing. Some interior wiring is still present. Ian Nicholson said Shire workers removed the parts, and “spruced it up” before erecting the airframe in front of the museum. The camera was missing, however there was about 400 litres of fuel in the fuel tank.

The following parts are located in the museum:

- Instrument panel
- Ejection seat
- Rolls Royce Nene Engine, Mark 2 VH Engine No CAC 88
- Fuel tank
- Hispano Mk. V 20mm Cannon
- Drop tanks
- VHF Radio
- Left main wheel
- Nose wheel

Some of these parts are marked with 638 however there is little provenance related to the parts and not all may be from the Vampire A79-638. It should be noted that the RAAF Record Card lists a Goblin (number 1663) as the installed engine for this airframe. The engine in the museum is a Rolls Royce Nene made in Australia for the single seat Vampires.

Comparative examples

The Museum holds another Vampire A79 Mk.T. 35 jet airframe of this era, installed at Hunt Road, Beverley.

Other collections

A number of the de Havilland Vampire are restored and on display internationally. A small number are flying. The following are representative of collections holding T.35 variants.

Temora Aviation Museum holds a DH-115 Vampire T.35 S/N: A79-617 built in 1951 and delivered to the RAAF on 22 May 1958. The aircraft was put into service with the Central Flying School at East Sale in Victoria, and later transferred to No. 1 Advance Flying Training School at Pearce in WA. It is the only Australian built Vampire flying in Australia.

RAAF Association Aviation Heritage Museum, Bull Creek

The Vampire in the Museum is an Australian-built T35A trainer version, has construction number 4101, and was in RAAF service as A79-821.

Historical Aircraft Restoration Society

de Havilland DH-115 Vampire T-35, A79-637 (#DHA 4159) and A79-665 (#DHA 4187)

In RAAF service through the 1950s and 1960s, and in the RAAF Aerobatic Team the TELSTARS in the period 1963/1967. A79-637 is being restored to airworthy condition. A79-665 is not airworthy but is taxi-able.

SOUTH AUSTRALIA AVIATION MUSEUM

de Havilland Vampire T Mk 35 A79-616

Operated by No 2 Flying Training School at RAAF Base Pearce in Western Australia, and restored by Maintenance Squadron East Sale in the mid-1990s. Made from the wings and tail booms of A79-827 and the fuselage pod of A79-616. The aircraft is painted as A79-616 and wears the colours of the "Telstars" aerobatic team.

Statement of Significance

The Museum's de Havilland Vampire A79 was built by de Havilland Australia and delivered to RAAF in 1959. This is a two-seat training jet used to train pilots at RAAF base Williamtown, New South Wales and the Central Flying School at East Sale, Victoria. The Vampire was placed in storage at RAAF Base Pearce in 1968 and approved for disposal in January 1970.

The Shire of Beverley acquired the airframe direct from RAAF Base Pearce. Shire of Beverley staff assembled and installed it in front of the Museum in that year. Most parts were removed and displayed in the museum.

The airframe is painted in silver and orange colour scheme, and displays its serial number and the RAAF colours and roundel. Museum volunteers and more recently contracted workers painted the airframe. It has been displayed in the open since it came into the collection and is in good to fair condition. The bodywork is crumpled and dented in places. Some repairs have been carried out however the airframe is showing evidence of rot and rust and is in need of attention.

The maker is well-known internationally. De Havilland developed the Vampire during World War II and produced the aircraft in several versions. These flew with the air forces of more than 15 countries, including Australia. The Vampire is historically significant as the RAAF's first operational jet and the first made in Australia. This version is Australian built, one of sixty eight of this model made by de Havilland Australia for the RAAF, as dual seat training aircraft.

The Vampire is aesthetically significant because it was considered experimental and showed a new direction in design, using a single engine and unconventional configuration. The aircraft is a twin boomed, two seater training version. The fuselage was constructed from timber and aluminium. The jet was powered by a single Goblin engine produced by de Havilland. This is an important example of post WW II jet aircraft used in military aviation in Australia. It reflects the technological changes in aviation design and trade skills of that time.

Provenance includes the *Aircraft and Marine Craft – Record Card* from RAAF (1959 -1970) listing maintenance during the aircraft's working life. The history of the de Havilland Company and the production of the Vampire jets is well documented. The airframe is not accessioned but its provenance can be partially traced through newspaper and published references.

The Museum also holds another Vampire T.35, located at Hunt Road, Beverley. Interpretive potential of the two Vampires, with related parts and display in the museum, is moderate. The A79's add to the context of the collection, representing Australian military aviation. The vampire occupies a prominent position outside the museum, creating an entry statement/landmark for the museum.

De Havilland Vampire A79-651

Hunt Road, Beverley



Description

Airframe of De Havilland DH.115 Vampire T.35, a two-seat advanced and weapons training aircraft.

Specifications

Make and Model	De Havilland DH.115 Vampire T.35
Year of manufacture	Mid-Late 1950's
Serial Number	A79-651
Dimensions	Approx. 10 metres L x 12 metres W (wingspan) Frame 2.53m at tallest point
Construction Number	4173
Aircraft Type	T.35
Engine	Goblin, engine number: possibly 16675, (removed prior to accession)
Style	Single engine, two seat training jet of twin boomed configuration
Marks and Imprints	Painted grey/silver with orange on wing tips and nose (upper half) A79-638 lettering, RAAF colours and roundel Metal plaque, installed at site (<i>text below</i>) DE HAVILLAND VAMPIRE JET DH-100 The Vampire Mark 1 made its maiden flight on 20 September 1943 when it flew from the grass airstrip at Hatfield, UK. Initial Design: Designed during World War 11 Unusual twin boom layout Goblin engine with thrust of 1400kg Australian Design: 80 Nene Vampires were produced from 1949 to 1953 Rolls Royce Nene engine with thrust of 2040kg Performance: Maximum speed of 882km/h at 30,000ft Initial climb 1,371m per minute

	<p>Service ceiling 13,100m Range, 1,266km</p> <p>Armaments: 4 Hispano MK5 20mm canons mounted on the lower forward fuselage.</p> <p>The Vampire entered the Royal Australian Air Force Squadron service in April 1946. It was the second jet aircraft in service with the RAAF This Vampire was offered to the Shire at no cost, provided the Shire was able to relocate it from the Geraldton area. The Vampire outside the museum on Vincent Street was purchased by the Shire from the RAAF for 50 pounds (\$100)</p>
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History and Provenance

The aircraft was mass produced by de Havilland Australia, at its workshop at Bankstown for the Royal Australian Air Force. It was delivered new to RAAF in September 1959. It was transferred from The No. 1 Applied Flying Training School (No. 1 AFTS) at RAAF Base Pearce to Number 34 Special Transport Squadron, Canberra on 28 October 1959. It returned to Pearce on 13 November 1959 where it was in service until July 1969. RAAF used the aircraft as a training jet for advanced pilots. The Vampire was placed in storage at RAAF Pearce in 1969 and approved for disposal in February 1970.

De Havilland Aircraft

Geoffrey de Havilland established de Havilland Aircraft Company Limited in late 1920 in Edgware, England. Operations were later moved to Hatfield, Hertfordshire. The de Havilland Aircraft Company developed a number of important aircraft in the 1920s and 1930s including the Moth biplane and the Mosquito light bomber for the Royal Air Force (RAF) and the pioneering passenger jet service Comet.

De Havilland Aircraft Company established de Havilland Aircraft (DHA) in Melbourne in 1927, their first subsidiary outside the United Kingdom. In 1930 DHA relocated to Mascot aerodrome in Sydney. During the 1930s and 1940s DHA assembled and/or manufactured Tiger Moths, DH.84 Dragons and DH.98 Mosquitos for the Royal Australian Air Force (RAAF). In 1943 the company established a plant at Bankstown, New South Wales. In 1960 de Havilland became Hawker de Havilland Australia Pty Ltd as part of the Hawker Siddeley group and in the 1980s changed its name to Hawker de Havilland Limited. Boeing purchased the company in 2000, re-naming it Hawker de Havilland Aerospace Pty Ltd.

The Vampires

De Havilland developed the Vampire in its UK factory at the end of World War II however the aircraft was not used for combat in that arena. It was a single-engine jet fighter, a design made possible due to the development of more powerful engines. The aircraft set many aviation records, being the first RAF fighter with a top speed exceeding 500mph, and the first jet aircraft to land on and take off from an aircraft carrier.

Between 1943 and 1961, de Havilland built 3,987 Vampires – in 15 versions – in Australia and five other countries. At their Bankstown workshop, de Havilland built 80 single seat aircraft, powered by Rolls Royce Nene engines under licence to the Commonwealth Aircraft Corporation. These were the first jet-propelled fighter aircraft built in Australia. The first Australian built Vampire flew in June 1949.

Variants

Between 1949 and 1960, de Havilland built 192 of the A79 type Vampires, (Mk. 30/31/33/34/35) for the RAAF. Developed initially as a single-seat fighter bomber, the DH.115 dual-seat version was introduced in 1951 to train pilots. Sixty eight T.35's, a modified version, were built in Australia. The Australian built twin-seat Vampire trainers T.33, T35, T35A retained the de Havilland Goblin engine. Single seat Vampires were retired in the RAAF in 1954.

The first Mk. T. 35 model trainers entered service in September 1957. This aircraft is associated with RAAF base Pearce, home to The No. 1 Applied Flying Training School (No. 1 AFTS). A79-651 is unusual in that it also served with No.34 Special Transport Squadron at Canberra for a short time. Other RAAF units that used the two-seat Vampires include The Central Flying School at East Sale, No. 2 Fighter Operational Conversion Unit at RAAF Base Williamtown, NSW, and RAAF Base Point Cook. A number also served with No.5 Operational Training Unit, Williamtown.

The RAAF phased out the Vampires from the late 1960s and most were decommissioned by 1970. Hawker de Havilland at Perth Airport was commissioned to dismantle the Vampires for disposal. A number were acquired and installed at museums, aviation sites and other locations around Perth as landmarks and for promotional signage. Many found their way to Perth scrap dealers and were salvaged for metal.

The A79-651 displayed at Hunt Road, Beverley came from Geraldton. It appears that some time after decommissioning by the RAAF the aircraft went to Geraldton (to the Chamber of Commerce, Apex and/or Rotary Clubs) but was not assembled or displayed. The Vampire can be seen pictured at Geraldton Airport in May 1971 on www.goodall.com.au.

The Shire of Beverley then acquired the Vampire. David Paton, in undated notes, said "One of the shire trucks was despatched and a shire worker named Trever Boyle loaded the aircraft plus an extra fuselage and brought it to Beverley". A photograph picturing the aircraft in parts, loaded on a truck (and referred to by Paton) is displayed in the Museum. A79-651 was stored in parts for some years at a shed at the Agricultural Showgrounds, Beverley (1985) before local Forbes Woods re-assembled it and manufactured missing parts/sections. It was installed at Hunt Road, Beverley in 1989. The date 4/5/89 and initials EF, FW (Forbes Wood) and MB are marked in the concrete pad. Plaques were later installed at the site and at the Museum.

Provenance includes:

- *Aircraft and Marine Craft – Record Card* from RAAF (1959 -1970) – details date received, movements, and maintenance in the aircraft's working life including services at de Havilland, Bankstown
- Correspondence from Air Force Association Aviation Historical Group requesting exchange of cracked "Vampire front oleo-leg/s" with one in Beverley museum 12 April 1984. Affirmative response from Keith Byers 26 April 1984.
- Newspaper article *The Express*, January 30, 1985 with photograph showing unrestored Vampire cockpit in storage at the Beverley Showgrounds
- Correspondence from Shire Clerk, Keith Byers to Barnsley Motors, Beverley in thanks for use of shed for storing Vampire plane 25 Feb 1986
- Correspondence from Shire Clerk, Keith Byers to Mr JFW (Forbes) Woods, Beverley "to convey sincere thanks for the effort you made with the restoration of the Vampire in Hunt Road". 19 May 1989

- Correspondence, 30 November 1990 from Shire Clerk Keith Byers to RAAF Association Aviation Museum of WA – listing items surplus to our requirements including Vampire parts”. Reply 6 December 1990. RAAF Museum did not wish to acquire parts.
- Correspondence between the Shire of Beverley and Air Force Association Aviation Historical Group
- Notes by David Paton
- Photographs and various published references
- The disassembled Vampire can be seen near Geraldton in June 1971 on www.goodall.com.au.

Donor’s, owner’s and community recollections

The consultant had discussion with former shire staff Keith Byers, Ian Nicholson and Des Cunningham and museum volunteer Roma Paton who was involved in the museum in the late 1990s and early 2000s. Roz Turner, Unit Histories Officer, A/Senior Historical Officer, Office of Air Force History, Canberra provided records for the museum’s Vampire from the RAFF archives. Other sources include:

- Aviation Heritage Museum, Bull Creek
- RAAF Base Pearce
- Martin Edwards, ADF serials

Context of Use

The Vampire is one of a fleet of military training aircraft manufactured and/or operated in Australia for Air defence. The aircraft was used at the RAAF’s flying schools in the employment of instructors and training of RAAF pilots following their basic training.

The first Vampires arrived at RAAF Base Pearce in 1951 for use by Number 25 Squadron. The No. 1 Applied Flying Training School (No. 1 AFTS), relocated to Pearce in 1958 where it specialised in de Havilland Vampire jet trainers. A large fleet of Vampire two-seat trainers were used at Pearce until 1969 when the new Macchi MB.362 trainers were introduced. Some 575 pilots gained their wings during this time.

Pearce Book 2008 described the first summer at Pearce:

Some of the Cadet pilots initially found some difficulty in adapting to the speed of the new jet, especially in the "circuits and bumps" stage. In the summer, flying instructors and cadets said it was unbearably hot to enter the cramped cockpit, of the side by side seating arrangement, when aircraft were left in the broiling sun. This discomfort was further exacerbated when flying exercises to very high altitudes the aircraft heaters had to be activated soon after take off so that by the time the high altitude was achieved the windscreen was protected from icing or fogging. Tests of pilots showed that the loss of body fluids during a flying lesson was extremely high when cockpit temperatures on the tarmac were around 140 degrees Fahrenheit.

This aircraft belongs to a group post-World War II fighter jets. By 1950, the RAAF fleet comprised Vampire and Mustang fighters, Lincoln bombers, Dakota transports, Catalina flying boats, Mosquito survey aircraft and other aircraft including Tiger Moths and Wirraways. Pilots previously trained on Tiger Moth bi-planes and Wirraways, followed by the Winjeel, a three seat training aircraft. The Vampire in contrast was sleek, fast, agile and reliable⁹. The Vampire represents the transition between these aircraft and the larger, more powerful Macchi MB-326H jets that superseded it in the late 1960s.

⁹ Canada Aviation and Space Museum, www.casmuseum.techno-science.ca

The Vampire was the first jet aircraft made for the RAAF. The pilot was seated well forward in the central nacelle beneath a bubble canopy, and had an excellent field of view. The training instructor sat beside the pilot. Later models had an ejection seat.

Fabric and condition of object

The aircraft has a twin boom configuration with the cockpit and engine located in a short, centralised nacelle. This reduced the length of intake and outlet ducting. It had a single turbojet engine which exhausted out of the rear of the nacelle through a ring.

The tail is carried by two slender booms. These extend from mid-chord on the monoplane wings which are set midway along the sides of the fuselage. Each boom holds a small vertical tail fin and is connected at the (aft) tail end by a large horizontal stabiliser. The jet armament was four 20 millimetre Hispano cannon fitted to the underside of the forward fuselage. Additional ordnance (or drop fuel tanks) could be carried under the wings. The jet had a tricycle undercarriage.

The cockpit/engine nacelle structure was constructed using a plywood-balsa-plywood sandwich method. The fuselage was built in two halves, fitted out in construction and then joined along the central line. The wings, tail surfaces and booms were made of aluminium.

The Vampire A79-651 is mounted on a metal framework (2.53m tall) installed on a concrete pad adjacent to Hunt Road, Beverley. Materials include fibreglass, timber, metal and canvas. The Vampire is non-operational and most interior parts, the landing gear, nosewheel, and drop tanks have been removed. The "front leg/s" from this or the A79-381 were exchanged with the Air Force Association Aviation Historical Group (now AHM) c1984 to replace those of the damaged Vampire Jet in their collection.

The airframe is in good to fair condition for display purposes. The airframe has been displayed in the open since it came into the collection. The wind shield has been cracked at some point. Some of the body work is crumpled and dented, probably incurred during freighting, storage and/or installation. The fuselage timber is showing rot, and the paintwork is flaking and cracked. There is some surface rust on the undercarriage and the installed support frame. Some of the bodywork has been patched and silicone used in attempt to weatherproof the airframe. It is not known who completed this work. Graffiti (Bogan Customs skull and crossbones) has been stencilled in blue paint on the nose. At the time of visiting, swallows were nesting inside the wings.

The fuselage and wings are painted grey/silver, and the wing tips and nose orange. A79-638 lettering is hand-painted on both booms. The red, white and blue RAAF colours are displayed on both sides of tail fins and the RAAF roundel (with Red Kangaroo 'in motion' introduced in July 1956) can be seen on the tail booms. The cockpit glass has been painted black inside. Museum display notes state that Forbes Wood reassembled the aircraft and "was instrumental in making the metal parts that were missing and finally putting this aircraft together". The aircraft has been painted two or three times since installation – by David Paton for the Beverley Air Show of 2000 and Dennis Watts in 2012.



Vampire before and after painted by David Paton for Beverley Air Show, 2000

Comparative examples

The Museum holds another Vampire A79 Mk.T. 35 jet airframe of this era, installed at Vincent Street, Beverley, in front of the museum.

Other collections

A number of the de Havilland Vampires are restored and on display internationally. A small number are flying. The following are representative of collections holding T.35 variants.

Temora Aviation Museum holds a DH-115 Vampire T.35 S/N: A79-617 built in 1951 and delivered to the RAAF on 22 May 1958. The aircraft was put into service with the Central Flying School at East Sale in Victoria, and later transferred to No. 1 Advance Flying Training School at Pearce in WA. It is the only Australian built Vampire flying in Australia.

RAAF Association Aviation Heritage Museum, Bull Creek

The Vampire in the Museum is an Australian-built T35A trainer version, has construction number 4101, and was in RAAF service as A79-821.

Historical Aircraft Restoration Society

de Havilland DH-115 Vampire T-35, A79-637 (#DHA 4159) and A79-665 (#DHA 4187)

In RAAF service through the 1950s and 1960s, and in the RAAF Aerobatic Team the TELSTARS in the period 1963/1967. . A79-637 is being restored to airworthy condition. A79-665 is not airworthy but is taxi-able.

SOUTH AUSTRALIA AVAIATION MUSEUM

de Havilland Vampire T Mk 35 A79-616

Operated by No 2 Flying Training School at RAAF Base Pearce in Western Australia, and restored by Maintenance Squadron East Sale in the mid-1990s. Made from the wings and tail booms of A79-827 and the fuselage pod of A79-616. The aircraft is painted as A79-616 and wears the colours of the "Telstars" aerobatic team.

Statement of Significance

The Museum's de Havilland Vampire A79-651 was built by de Havilland Australia and delivered to RAAF in 1959. This is a two-seat training jet used to train pilots at RAAF Base Pearce, Western Australia. The Vampire was placed in storage at Pearce in 1969 and approved for disposal in February 1970.

The Shire of Beverley acquired the airframe from Geraldton. It was stored for some years until Beverley local Forbes Woods assembled and restored the airframe. It was installed at the current site, adjacent to Hunt Road Beverley by 1989.

The airframe is painted in silver and orange colour scheme and displays its serial number and the RAAF colours and roundel. Museum volunteers and more recently contracted workers painted the airframe. It has been displayed in the open since it came into the collection and is in fair condition. The bodywork is crumpled and dented in places. Some repairs have been carried out however the airframe is showing evidence of rot and rust and is in need of attention.

The maker is well-known internationally. De Havilland developed the Vampire during World War II and produced the aircraft in several versions. These flew with the air forces of more than 15 countries, including Australia. The Vampire is historically significant as the RAAF's first operational jet and the first made in Australia. This version is Australian built, one of sixty eight of this model made by de Havilland Australia for the RAAF, as dual seat training aircraft.

The Vampire is aesthetically significant because it was considered experimental and showed a new direction in design, using a single engine and unconventional configuration. The aircraft is a twin boomed, two seater training version. The fuselage was constructed from timber and aluminium. The jet was powered by a single Goblin engine produced by de Havilland. This is an important example of post WW II jet aircraft used in military aviation in Australia. It reflects the technological changes in aviation design and trade skills of that time.

Provenance includes the *Aircraft and Marine Craft – Record Card* from RAAF (1959 -1970) listing its history and maintenance during the aircraft's working life. The history of the de Havilland Company and the production of the Vampire jets is well documented. The airframe is not accessioned but its provenance can be partially traced through newspaper and published references.

The Museum also holds another Vampire T.35, located at Vincent Street, Beverley in front of the Museum. Interpretive potential of the two Vampires, with related parts and display in the museum, is moderate. The A79's add to the context of the collection, representing Australian military aviation. The vampire occupies a prominent position on a main road, creating a promotional landmark for the museum and town.

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Canada Aviation and Space Museum	www.casmuseum.techno-science.ca
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Collections Australia Network	www.collectionsaustralia.net
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Historical Aircraft Restoration Society	www.hars.org.au
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The Smithsonian's National Air and Space Museum	www.airandspace.si.edu/collections
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Government of Western Australia
Department of Regional Development



APPENDIX

Appendix 1

Beverley Aeronautical Museum Inventory – DRAFT

ITEM	INFORMATION	DONOR
Photographic Collection and Interpretive Displays and notes	Photographic copies of photographs (pre-digital) including: <ul style="list-style-type: none"> • <i>Silver Centenary</i> • Amana Crash • First Flight in the World, Pearse monoplane print • Australian pioneers • Blackburn Beverley, UK • First attempts at aircraft construction • The young eagles of Kalgoorlie (cabinet) • Notable events and Personalities – Galway Aircraft, Evans Monoplane • Albany Plane, first attempts at aircraft construction • De Havilland Vampire (DH-100) trainer • Macchi jets • North-west Aerial Service • Perth-Adelaide Service • Early Western Australian Pioneers • Aero Clubs in WA • Charles Kingsford Smith • Royal Australian Air Force • Flying Plank • Amana Crash • DH 53 Hummingbird 	Various
Paper Items	<ul style="list-style-type: none"> • Spirit of Beverley, Twin-Astir, framed photo • <i>Into the Sun, Southern Cross; Early Days, Qantas DC3; Heading North, Catalina Flying Boat; Carrying the Mail, The Royal Mail Service</i> framed original paintings by John Bradley • Significant Events in West Australian Aviation History – framed poster map with events, produced by Aviation Heritage Museum • TAA map of Australia • USS Akron Airship, United States Navy, laminated and framed prints • Technical Manuals/ Profession library (James Dean, TAA engineer) • Australian Aviation magazines (Peter Garnett donor) • RAAF certificate of Service and Discharge , Herbert Bedford Blythe, framed document dated 1946 (Lorraine 	Various

	<p>Smith donor)</p> <ul style="list-style-type: none"> • WWII memorabilia (file) RNZA • 93 Squadron RAAF Frank Ford album • Beverley Air Show (x3) & Aviat70 (x1) posters 	
AIRCRAFT		
Amana Memorial to 1950 crash	<p>Landing gear from Amana DC4 aeroplane with memorial plaque listing victims, dedicated 26 June 2001.</p> <p>Newspapers articles, accident report and statements, photographs, portrait, trophy, correspondence from family members of crash victims, anniversary</p>	Mr and Mrs Barton, Northam
Collection of Model Aircraft, large	<ul style="list-style-type: none"> • De Havilland Comet, Malaysian-Singapore Airlines • Boeing 707, Malaysian Airlines x2 (one in shed) • Qantas • Air India VT-EBE Emperor Shah-Jenan • South African Airlines ZS-SAD N° 64 	Commercial airlines
Collection of Model Aircraft, small	<ul style="list-style-type: none"> • Approximately 42 model aircraft, figurines and 2 silver cups 	Family of Ron Sleep ?Des Cunningham
The Flying Flea, model	<p>Model of plane originally built by John Cork 1938. Made by John Cork, 1983 Restored by Aviation Heritage Museum, wings restored by Frank Matthews.</p> <p>Includes photograph of Jack Cork, correspondence with John Cork, notes from donor, newspaper article and photos</p>	Jack Cork
The Flying Plank, glider	<p>Information and correspondence from donor, photograph. Restored by Frank Matthews</p>	Alan Hewitt, 2009
The Grasshopper	<p>Home-made Glider made by Geoff Spehar for Perth Birdman rally, 1978</p>	Frank & Lynne Matthews, 2009
Vampire A79-638, Museum	<p>Installed at front of museum. Shire of Beverley purchased from RAAF. Parts removed and inside Museum.</p> <p>General photographs of Vampire aircrafts, correspondence about exchange of parts</p> <ul style="list-style-type: none"> • Hispano Mk. V 20mm Cannon • Drop tanks x2 • Instrument panel from cockpit • Ejection seat • Engine • Fuel tank • Main wheel • Nose wheel • VHF Radio 	RAAF (purchased)
Vampire parts		RAAF (with aircraft) and ?Aviation Heritage Museum
Vampire A79-651, Hunt Road	<p>Installed at Hunt Road, with plaque. Forbes Woods made up missing metal pieces and reassembled</p>	Geraldton

PARTS		
AWA Teleradio Sixty Five	As used at remote homesteads to contact RFDS and School of the Air	
Bristol Siddeley Jet Engine and parts	Viper MKII Type 22/11, Macchi Mk 326 Jet trainer operator, RAAF Pinned and labelled display of parts	Bryant James. Shire acquired
Compass - maritime		
Compass	Mounted in timber box, stamped, key. Believed used in Liberator, Hudson, Catalina aircrafts	E Richman-Scott
De Havilland 250HP Gipsy Queen 30 engine, 1950	Powered post-war aircraft	?AFA Aviation Historical Group
F24 Camera	As used in Spitfire (fitted to each wing) for reconnaissance and recording Correspondence thanking donor 28 June 1984	Doug Sue
Flying Jacket	Air Commander PG Lings (Nobby) OBE WW2, Japan, Commander of Number 2 Air field Construction, Cocos island, Manus Island, Woomera, Darwin and Butterworth.	
Hamilton Standard Propeller		
Low pressure oxygen cylinder	Dakota aircraft	Melissa Green, Wyalkatchem
Silver Pratt & Whitney 1340 Cylinder	From 600 HP Radial Engine	Gerald Repacholi
MEMORABILIA/SMALL OBJECTS		
Aircraft parts box	Timber box, stamped - to MacRobertson Miller, Guildford WA from United Aircraft, Canada	Alan Healey
Gas mask	British Army WWII, 1941	Jim & June Evans
RAAF Insignia/badge	Flight Lieutenant Frank Ford, WWII service	
Plessey Instrument panel	?Perth Airport control tower	Beverley Soaring Society
Radiator Cap ornament	Timber (mounted) and cast metal. From Charles Kingsford-Smith's Vulcan truck, Gascoyne Transport Company at Carnarvon	Janet Nelson-Whiteside, 2004
Rue Capitaine Duellin street marker	Blue enamel and metal memorial marker	
TAA, BOAC and Qantas flight bags		
Truscott Strip relics	Pinned display (with list, photographs and information), 1980 <ul style="list-style-type: none"> • aircraft bomb loading gear • kerosene hand pump • bomb fuses • incendiary bomb stick • Tommy gun ammunition magazine • Hudson Bomber wing fuel filler car • Tip of wing from Japanese reconnaissance aircraft KL-46 Mitsubishi 	

	<p>shot down over Truscott Airfield</p> <ul style="list-style-type: none">• Name plate from Mitchell bomber• Parts of Liberator bomber• crew coffee pot• part of radar equipment• Auxiliary generator parts• 50 calibre ammunition guides for clipped ammunition belts	
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