Guide to the S. Newman Darby Windsurfing Collection

NMAH.AC.0625
Laura Zelasnic
1999
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Collection Overview

**Repository:** Archives Center, National Museum of American History

**Title:** S. Newman Darby Windsurfing Collection

**Identifier:** NMAH.AC.0625

**Date:** 1944-1998

**Extent:** 2.65 Cubic feet (7 boxes, 1 oversize folder)

**Creator:** Darby, S. Newman, 1928-2016 ((inventor))
Darby, Kenneth
Darby, Naomi

**Language:** English

Collection text is in English.

**Summary:** The collection documents S. Newman Darby's development of the sailboard, which became known as the windsurfer through sketches, mechanical drawings, plans, patent specifications, legal documents, photographs, correspondence, notebooks, clippings, periodicals, and an 8mm film.

Administrative Information

**Acquisition Information**

Most of the collection was donated to the Archives Center of the National Museum of American History by S. Newman Darby and his wife Naomi on February 3, 1998.

**Separated Materials**

The Division of Culture and the Arts holds artifacts relating to S. Newman Darby and his invention of the windsurfer, including an original board, boom and mast, and sail dating from 1964. See accessions #1998.0086 and #1998.0323.

**Related Materials**

An original sailboard, rig, mast and daggerboard from the same period are also housed in the Pennsylvania State Museum at Harrisburg.

**Processing Information**

The collection was processed by Laura Zelasnic, intern, 1999; revised Alison Oswald, archivist, 2010.
Biographical / Historical

S. Newman Darby is recognized as the first person in the United States to conceive of connecting a hand-held sail rig fastened with a universal joint to a floating platform for recreational use. He called it sail boarding in 1965, when he published his designs in Popular Science Monthly magazine. Although he and his brothers Ronald and Kenneth began manufacturing the boards through their company Darby Industries, they never applied for a patent.

S. Newman Darby (1928-2016) was born in West Pittston, Pennsylvania. He graduated from West Pittston High School in 1946. A sign painter and artist, like his father Sidney Darby, he studied drafting at the Pennsylvania State University extension school where he took chemistry, business, art, and photography courses for one year. His first invention, the Darby Dory, a folding rowboat dates from 1953. The sailboard developed out of Darby's experiments with a personal pontoon catamaran, each hull being big enough for one foot and designed to be operated with a hand-held sail and no rudder. By 1964 he had designed a universal joint that connected a mast to a flat bottom sailing scow. This board had a centerboard, tail fin and kite shaped free sail. Early tests were conducted on Trailwood Lake and the Susquehanna River, near West Pittston.

Today sail boarding is known as windsurfing. It adopted its name from Windsurfer International, a company Hoyle Schweitzer and Jim Drake established on the basis of a patent granted to them in 1970 for a "wind-propelled apparatus." In all essential qualities, their claims duplicated Newman Darby's earlier work.

After Schweitzer bought out Drake's share in 1973, he energetically promoted the sport and licensed manufacturing rights to more than 20 companies around the world. Schweitzer forcefully prosecuted patent infringements he perceived among windsurfer manufacturers and he threatened to sue the 1984 Olympic Committee should it authorize a board produced by a manufacturer not licensed by Windsurfer International. Although he was aware of the growth of the sport and the profits flowing into Windsurfer
International through its licensing activities, Darby was unable to mount a legal challenge to Schweitzer. His priority in the invention of the sport was overlooked and almost forgotten.

In the late 1970’s, Mistral, a Swiss manufacturer sued by Windsurfer International in Germany, located Darby and presented his "prior art" as a defense. In the early 1980's, courts in the United States were asked to rule on the validity of the Windsurfer International patent. Newman Darby's prior art was at the center of the controversies. The court voided Windsurfer's original patent and Schweitzer was forced to apply for a reissue based on severely limited claims. He lost the use of "windsurfer" as a trademark. Schweitzer retained the reissued patent through further challenges until it expired in 1987. The example of Newman Darby has become a textbook case of the importance of thorough searches for "prior art" for patent attorneys.

Following completion of the patent litigation Darby designed original sail rigs for Mistral in Europe and Horizon in the United States. In 1982 Newman entered into a new partnership with his brothers Ronald and Kenneth and formed NRK, Inc., to design and manufacture windsurfing boards, training devices and to produce written and video documentaries of his contributions to the history of the sport.

Naomi Albrecht Darby, Newman's wife, sewed the first sails for the boards and participated in their testing and marketing. She documented Darby's inventions through the years in photographs and moving images. Over the years, Darby has worked on numerous inventions--most of them related to wind propulsion. Like many independent inventors, Newman Darby conceives of his ideas, executes all of the mechanical plans, builds his own prototypes and tests them. Darby continues to research improvements in windsurfing and to teach courses in boat building and design.

Scope and Contents

The S. Newman Darby Windsurfing Collection, 1946-1998, documents the body of Newman Darby's inventive output as well as the development of the windsurfing industry. It consists of sketches, mechanical drawings, plans, patent specifications, legal documents, photographs, correspondence, notebooks, clippings, periodicals, an 8mm film and a videocassette. The collection is particularly rich in the material related to the development of the sailboard, including Darby's personal memoirs. It contains U.S. and foreign patents related to windsurfing as well as records and reports related to Darby's testimony in litigation and the recognition of the priority of his invention. the collections research value lies in the documentation of the invention of the windsurfer and the industry and culture it spawned. It documents the processes of invention and marketing of new devices. It is evidence of the full range of S. Newman Darby's imagination, life and career.

Arrangement

The collection is divided into six series.

Series 2: Inventions and designs, 1953-1990
Series 3: Darby Industries, 1982-1983
Series 5: Photographs, 1946-1997

Names and Subject Terms

This collection is indexed in the online catalog of the Smithsonian Institution under the following terms:

Subjects:
Aquatic sports -- 1950-1990
Boatbuilders -- 1950-1990
Boats and boating -- 1950-1990
Boats and boating -- Designs and plans -- 1950-1990
Darby simulator
Inventions -- 1950-2000
Inventors -- 1950-2000
Patent law and legislation -- 1950-1990 -- United States
Patent licenses
Patents (international law) -- 1950-1990
Sailboats -- 1950-1990
Sporting goods industry -- 1950-1990
Windsurfers -- 1950-1990
Windsurfing -- Inventions -- 1950-1990

Types of Materials:
Advertisements -- 1950-2000
Blueprints -- 1950-2000
Correspondence -- 1940-1990
Design drawings -- 1950-2000
Drawings -- 1950-1990
Film (performing arts) -- 1950-1990
Illustrated periodicals -- 1950-1990
Legal files -- 1950-1990
Photographs -- 20th century
Rigging plans -- 1950-1990
Sail plans -- 1950-1990
Sketches -- 1950-1990
Videotapes

Names:
Drake, Jim
Mistral, Inc.
Schweitzer, Hoyle
Windsurfing International, Inc.

Geographic Names:
Falls (Pa.) -- 1950-1990
Susquehanna River -- 1950-1990

Box 1, Folder 1

This series consists of a resume Darby wrote circa 1969, the syllabus and notes for a sailing course he taught in 1982 and drawings and designs by other family members. Other biographical materials can be found in Series 4: History of Windsurfing, 1944-1998; Series 5: Photographs, 1946-1997; and Series 6: Audio-Visual Materials, 1965-1997.

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Series 2: Inventions and Designs, 1953-1990

This series contains sketches, mechanical drawings and written documentation for concepts and invention prototypes produced by S. Newman Darby. Materials related to the invention of the sailboard, its publication in Popular Science in 1965 and Darby's subsequent development of the form as well as the innovative rigs he designed for other manufacturers are here. There are the original mechanical drawings for the first sailboard plans. His graphic designs are presented in materials for the Darby 12 model sailboards. A list of retail outlets for windsurfers c. 1983 is located in the marketing folder. Some photographs of individual pieces can be found in this series but most are found in Series 5: Photographs, 1946-1997.

Box 7, Folder 1    Darby Dory Drawings, undated
Box 1, Folder 2    Darby Dory, 1953-1959
Box 1, Folder 3    Catamarans, 1961-1983
Box 1, Folder 4    Folding Boat, 1965
Box 1, Folder 4A   Hinged Boat, 1961 - 1961
                  Image(s)
Box 7, Folder 1    Camper-Sailboard, 1970-1983
Box 1, Folder 5    Motorized Craft, 1965-1983
Box 1, Folder 6    Boomerang Rowing Seat for Canoe, 1969 - 1969
Map-folder 1      Blueprint 3-001: Boomerang Rowing Seat for Canoe, undated
Box 1, Folder 7    Buoyant Skeg, 1977 - 1977
Box 1, Folder 8    Sailboat Hulls, 1977 - 1977
Box 1, Folder 9    Swinging Bowsprit, 1977 - 1977
                  Image(s)
Box 1, Folder 10   Pedal Boat, 1977 - 1983
Box 1, Folder 11   Booms, 1977-1985
                  Image(s)
Box 7, Folder 1    Single Booms, undated
Box 1, Folder 12   Daggerboards, 1982 - 1982
Box 1, Folder 13  Darby Sailboard Disclosure, 1965
Map-folder 1  Sailboard and Sail Rig, 3-002
Map-folder 1  Sail Details, 3-003, 1964 - 1964
Box 1, Folder 14  Darby Sailboard Kit, 1972-1978
Box 7, Folder 1  Sailboard and Sailrig-Popular Science Project Plan No. 5552, 1972
Box 1, Folder 15  *Darby Sailboard Instruction Manual*, 1965
  Image(s)
Box 1, Folder 16  Darby Sailboard Sales Brochure, 1965
  Image(s)
Box 1, Folder 17  *Popular Science* Article, 1965
Box 1, Folder 18  Catamaran Sailboard, 1977
Box 1, Folder 19  Darby 12 Instructions Copyright, 1982-1983
Map-folder 1  Sailboard Construction Instructions, circa 1982
Map-folder 1  Instructions for Spruce Boom, 1982
Box 1, Folder 20  Daggerboard Cuts, 1983
Box 1, Folder 21  Specifications and Test Results, 1983
Box 1, Folder 22  Sailboard marketing, 1983
Box 1, Folder 23  Sailboard product suppliers, 1983
Box 1, Folder 24  Sailboard product information, 1983
  Image(s)
Box 7, Folder 2  Mechanical Drawings for Darby 12, Sales Brochure, 1982 - 1982
Box 1, Folder 25  Sailboard Hulls, 1970-1977
Box 7, Folder 1  NRK-1, NRK-2 Sailboard Hulls, 1982
Box 7, Folder 1  Plywood Sheet Sailboard, 1982
Box 1, Folder 26  Folding Ballast Kheel Sailboard, undated
Box 7, Folder 1  SP-2 Sailboard, undated
Box 1, Folder 27  Trimaran Sailboard, undated
Box 7, Folder 1  V-Bottom Sailboard, undated
Box 1, Folder 28  Sailboard Simulator, 1982

Map-folder 1  Sailboard Simulator Exploded Drawings, undated
Box 2, Folder 1-2  Variable Trimaran, 1979
Box 7, Folder 1  Variable Trimaran Sketches and Mechanical Drawings, 1979
Map-folder 1  Stagger Hull Trimaran Drawings, 1982-1983
Box 7, Folder 1  Stagger Hull Trimaran Drawings, 1982-1983
Box 2, Folder 4  Steam Jet Boat, 1982
Box 2, Folder 5  Rocking Chair Catamaran, 1983

Box 2, Folder 6  Sailboard Control Spar, 1985

Box 2, Folder 7  Side Step Hull, 1988-1990
Box 2, Folder 8  Amphibious Craft, undated
Box 2, Folder 9  Boomerang Rowing Seat for Sailboards, undated
Box 2, Folder 10  Combination Planing Foil and Boarding Ladder, undated
Box 2, Folder 11  Pick-Up Truck Yacht, undated
Box 7, Folder 1  Pickup Truck Yacht Sketches, undated
<table>
<thead>
<tr>
<th>Box, Folder</th>
<th>Category</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>Box 7, Folder 1</td>
<td>Sailboat-Sailboard Combination</td>
<td>undated</td>
</tr>
<tr>
<td>Box 2, Folder 12</td>
<td>Double Mast Sailing</td>
<td>1977-1981</td>
</tr>
<tr>
<td>Box 2, Folder 13</td>
<td>Kites</td>
<td>1964-1983</td>
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<tr>
<td>Box 2, Folder 14</td>
<td>Sloops</td>
<td>1969-1981</td>
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<tr>
<td>Map-folder 1</td>
<td>Instructions for Sloop III Rig</td>
<td>1982</td>
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<tr>
<td>Map-folder 1</td>
<td>SR-1 with jib traveler</td>
<td>1981</td>
</tr>
<tr>
<td>Box 2, Folder 15</td>
<td>Lateens</td>
<td>1979-1981</td>
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<tr>
<td>Box 7, Folder 1</td>
<td>Bowed Luft Split Lateen</td>
<td>1981</td>
</tr>
<tr>
<td>Box 7, Folder 1</td>
<td>Lateen Rig with Swivel Nylon Rope</td>
<td>undated</td>
</tr>
<tr>
<td>Box 2, Folder 16</td>
<td>Adjustable Sailboard Jib</td>
<td>1981</td>
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<tr>
<td></td>
<td>Image(s)</td>
<td></td>
</tr>
<tr>
<td>Box 2, Folder 17</td>
<td>SR-2</td>
<td>1981</td>
</tr>
<tr>
<td>Box 2, Folder 18</td>
<td>Schooner</td>
<td>1983</td>
</tr>
<tr>
<td>Box 2, Folder 19</td>
<td>Genoas</td>
<td>undated</td>
</tr>
<tr>
<td>Box 2, Folder 20</td>
<td>Chinese Junk</td>
<td>undated</td>
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<td>Box 2, Folder 21</td>
<td>Miscellaneous ideas</td>
<td>1958 - 1982</td>
</tr>
<tr>
<td>Map-folder 1</td>
<td>VTOL and VTOW Jet Transport</td>
<td></td>
</tr>
</tbody>
</table>

Materials consist of financial and other data related to the Darby’s businesses. The Product Line Subseries contains a prospectus with original brochures for all Darby products from 1964 through 1983. The contract materials contain the rig designs that Darby produced for Horizon Marine Enterprises and other companies.

Box 2, Folder 22 Corresposndence, 1966-1983
Box 2, Folder 23 Financial Data, 1982 - 1983
Box 2, Folder 24 Hahsa, 1983
Box 2, Folder 25 Contracts, 1981-1982
Map-folder 1 Darby Industries Signage, [1965-1967?]
Box 2, Folder 26 NRK, Inc., 1982
Box 2, Folder 27 Product Line, 1965-1983

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This series includes the notebooks and typescripts of S. Newman Darby's recollections and observations on the history and techniques of the "free sail system" of windsurfing. It also contains his many original drawings to illustrate what was to be two books on the subject and created to illustrate his pivotal testimonies during the years of challenges to the Windsurfing International patent from 1975 to 1984. Much of this material reappears as visual aids in the "Windsurfing from the Beginning" videocassette in Series 6. Legal materials included in this series are: all of the patents pertinent to the disputes, correspondence between the challenging attorneys and Darby, copies of affidavits and testimonies and a diary of his legal participation (1977-1981).

The Defendant's Binder of S. Newman Darby Documents contains photocopies of all photographs, brochures and newspaper coverage that support Darby's claim to prior art in the dispute. Other items in this series are newspaper and magazine interviews with or about Darby and a multipartite, illustrated series in American Windsurfer reaffirming S. Newman Darby's contribution for the next generation of windsurfers. Much of the material is annotated in the margins by Darby.

Subseries 4.1: Competitions, 1978-1987

Box 3, Folder 1  Olympic Sailboard Selection Materials, 1981
Box 3, Folder 2  World Cup Hawaii, 1978


Box 3, Folder 3

Subseries 4.3: Manuscripts, 1977-1983

Box 3, Folder 4  Chronological Diary/Inventor's Notebook, 1977-1979
Image(s)
Box 3, Folder 5  History of the Free Sail System Sailboard- Notebooks, 1982-1983
Image(s)
Box 3, Folder 6  History of the Free Sail System Sailboard, Notes and Revisions, 1983
Box 3, Folder 7  Riding the Wind and Waves: The Story of Sailboarding, 1983
Box 3, Folder 8  Illustrated Narrative; Figures 1-2, c. 1983
Box 3, Folder 9  Notes, 1982

Subseries 4.4: Patent Litigation, 1944-1984

Box 3, Folder 10  Clippings, 1980-1983
Box 3, Folder 11-12  Correspondence, 1975-1984
Box 4, Folder 1  Court Decisions, 1982
Box 4, Folder 2  Defendant's Binder of S. Newman Darby Documents, 1980
Box 4, Folder 3  Exhibits, circa 1980
Box 4, Folder 4  Record of Darby Participation, 1977-1982
Box 4, Folder 5  Ernstfried Prade Patent, 1978
Box 4, Folder 6  Hoyle Schweitzer Patent, 1970
Box 4, Folder 7  Hoyle Schweitzer Reissue Petition and Patent, 1978
Box 4, Folder 8  Related Patents, 1944-1979


Box 7, Folder 4  *American Windsurfer*, 1996-1998
Box 4, Folder 9  Clippings, 1965-1997
Box 4, Folder 10  Correspondence, 1972-1996
Box 4, Folder 11  Magazine Articles, 1983-1990
Box 7, Folder 3  *Sailboard News*, 1983 - 1987
Box 7, Folder 3  *Ski Business*, 1983 February

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Series 5: Photographs, 1946-2001

The photographs in this series are biographical and documentary. Most of them were taken by Naomi Darby and are annotated by S. Newman Darby. These annotations contain information fundamental to identifying inventions and people involved in Darby’s biography.

Box 5, Folder 1-2  Biographical Photographs, 1946-2000
Image(s)

Box 5, Folder 3  Boats, 1947-1963
Image(s)

Box 5, Folder 4-5  Booms, 1960-1990
Image(s)

Image(s)

Box 5, Folder 7-8  Rigs, circa 1965-1980s
Image(s)

Box 5, Folder 9  Mistral Rigs, circa 1979

Box 5, Folder 10  Sailboard Development, 1961-1965
Image(s)

Box 5, Folder 11  Sailboards, 1971-1997
Image(s)

Box 5, Folder 12  Side Step Hull, 1988-1990

Box 5, Folder 13  Slides, 1964-1997
Image(s)

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This series contains the 8mm film of S. Newman Darby sail boarding created by Naomi Darby in 1965. It also includes an unedited version of "Windsurfing From the Beginning," an original videotape made by Newman Darby in 1997 which examines his role in the history of the sport and the theory and practice behind some of his subsequent inventions. S. Newman Darby's handwritten script, illustrations made specially for the production, and a sales prospectus are also included.

<table>
<thead>
<tr>
<th>Box 6, Folder 1</th>
<th>Windsurfing From the Beginning, Prospectus, 1997</th>
</tr>
</thead>
<tbody>
<tr>
<td>Box 6, Folder 2</td>
<td>Windsurfing From the Beginning, Script, 1997</td>
</tr>
<tr>
<td>Box 6, Folder 3</td>
<td>Windsurfing From the Beginning, Illustrations, 1997</td>
</tr>
<tr>
<td>Box 6, Item AC0625-OF0001</td>
<td>Darby Sailboarding Demonstration, 1965</td>
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<tr>
<td></td>
<td>1 Reel (8 mm)</td>
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<tr>
<td>Box 6, Item MV 625.1</td>
<td>Darby Sailboarding Demonstration, 1965</td>
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<tr>
<td></td>
<td>1 videocassettes (betacamsp)</td>
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<tr>
<td>Box 6, Item RV 625.1</td>
<td>Windsurfing From the Beginning, 1997 - 1997</td>
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<tr>
<td></td>
<td>2 videocassettes (vhs)</td>
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<tr>
<td>Box 6, Item RV 625.2</td>
<td>Darby Sailboarding Demonstration, 1965</td>
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<td>1 videocassettes (vhs)</td>
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<tr>
<td>Reel AC0625-OF0002</td>
<td>The Alice May, an early PWC Boat (1960) and S. Newman and Naomi Darby's wedding (1964), 1960, 1964</td>
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<td>1 motion picture film (8 mm)</td>
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<tr>
<td>Reel AC0625-OF0003</td>
<td>[First windsurfing movies, at Bay Bridge, Maryland], 1965</td>
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<tr>
<td></td>
<td>1 motion picture film (8 mm)</td>
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</table>

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