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.
Preferred Citation

Restrictions
Collection is open for research.

Conditions Governing Use
Collection items available for reproduction, but the Archives Center makes no guarantees concerning copyright restrictions. Other intellectual property rights may apply. Archives Center cost-recovery and use fees may apply when requesting reproductions.

Accruals

Four black and white photographs and an issue of the journals, Catalyst and Popular Mechanics, 1961 were added to the collection in 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
- Susquehana River -- 1950-1990
Container Listing


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

Box 1, Folder 16  Darby Sailboard Sales Brochure, 1965

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

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
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<tr>
<th>Box 7, Folder 1</th>
<th>Plywood Sheet Sailboard, 1982</th>
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<td>Box 1, Folder 26</td>
<td>Folding Ballast Kheel Sailboard, undated</td>
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<td>Box 7, Folder 1</td>
<td>SP-2 Sailboard, undated</td>
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<tr>
<td>Box 1, Folder 27</td>
<td>Trimaran Sailboard, undated</td>
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<td>Box 7, Folder 1</td>
<td>V-Bottom Sailboard, undated</td>
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<tr>
<td>Box 1, Folder 28</td>
<td>Sailboard Simulator, 1982</td>
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<tr>
<td>Map-folder 1</td>
<td>Sailboard Simulator Exploded Drawings, undated</td>
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<td>Box 2, Folder 1-2</td>
<td>Variable Trimaran, 1979</td>
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<tr>
<td>Box 7, Folder 1</td>
<td>Variable Trimaran Sketches and Mechanical Drawings, 1979</td>
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<tr>
<td>Map-folder 1</td>
<td>Stagger Hull Trimaran Drawings, 1982-1983</td>
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<tr>
<td>Box 7, Folder 1</td>
<td>Stagger Hull Trimaran Drawings, 1982-1983</td>
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<td>Box 2, Folder 4</td>
<td>Steam Jet Boat, 1982</td>
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<td>Box 2, Folder 5</td>
<td>Rocking Chair Catamaran, 1983</td>
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<td>Box 2, Folder 6</td>
<td>Sailboard Control Spar, 1985</td>
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<td>Box 2, Folder 7</td>
<td>Side Step Hull, 1988-1990</td>
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<td>Box 2, Folder 8</td>
<td>Amphibious Craft, undated</td>
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<td>Box 2, Folder 9</td>
<td>Boomerang Rowing Seat for Sailboards, undated</td>
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<td>Box 2, Folder 10</td>
<td>Combination Planing Foil and Boarding Ladder, undated</td>
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<td>Box 2, Folder 11</td>
<td>Pick-Up Truck Yacht, undated</td>
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<td>Box 7, Folder 1</td>
<td>Pickup Truck Yacht Sketches, undated</td>
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Box 7, Folder 1  Sailboat-Sailboard Combination, undated
Box 2, Folder 12  Double Mast Sailing, 1977-1981
Box 2, Folder 13  Kites, 1964-1983
Box 2, Folder 14  Sloops, 1969-1981
Map-folder 1  Instructions for Sloop III Rig, 1982
Map-folder 1  SR-1 with jib traveler, 1981
Box 2, Folder 15  Lateens, 1979-1981
Box 7, Folder 1  Bowed Luft Split Lateen, 1981
Box 7, Folder 1  Lateen Rig with Swivel Nylon Rope, undated
Box 2, Folder 16  Adjustable Sailboard Jib, 1981
  Image(s)
Box 2, Folder 17  SR-2, 1981
Box 2, Folder 18  Schooner, 1983
Box 2, Folder 19  Genoas, undated
Box 2, Folder 20  Chinese Junk, undated
Box 2, Folder 21  Miscellaneous ideas, 1958 - 1982
Map-folder 1  VTOL and VTOW Jet Transport

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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        Correspondence, 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
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.

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<tr>
<th>Box 5, Folder 1-2</th>
<th>Biographical Photographs, 1946-2000</th>
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<td>Box 5, Folder 3</td>
<td>Boats, 1947-1963</td>
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<td>Booms, 1960-1990</td>
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<td>Image(s)</td>
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<td>Box 5, Folder 7-8</td>
<td>Rigs, circa 1965-1980s</td>
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<td>Image(s)</td>
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<td>Box 5, Folder 9</td>
<td>Mistral Rigs, circa 1979</td>
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<td>Box 5, Folder 10</td>
<td>Sailboard Development, 1961-1965</td>
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<td>Image(s)</td>
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<tr>
<td>Box 5, Folder 11</td>
<td>Sailboards, 1971-1997</td>
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<td>Image(s)</td>
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<td>Box 5, Folder 12</td>
<td>Side Step Hull, 1988-1990</td>
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<tr>
<td>Box 5, Folder 13</td>
<td>Slides, 1964-1997</td>
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<td>Image(s)</td>
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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.

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