

**FINDING AID FOR THE  
RICHARD BOUDREAU APOLLO MISSION TECHNIQUES  
DOCUMENTS, 1966-1967 (#2015-0009)**

**Contact Information:**

University of Houston-Clear Lake Archives  
Neumann Library  
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**Descriptive Summary**

**Repository** (049): University Archives, Human Space Flight Collection

**Collection #** (099): 2015-0009

**Title** (245): Richard Boudreau Apollo Mission Techniques Documents

**Creator** (100/110): TRW Systems, Houston Operations

**Co-Creator** (700/710): Richard Boudreau

**Inclusive Dates:** 1966-1967

**Extent** (300): One 2.5" document box (1/4 linear foot)

**Language** (546): English

**Administrative Information**

**Restrictions on Access** (506): None

**Restrictions on Use** (540): None

**Acquisition Information** (541)

Richard Boudreau contacted the Archives on October 7, 2015 with an offer to donate his Apollo Mission Techniques documents to the Human Space Flight Collection housed here. A box containing the three books was mailed from Hawaii on October 8<sup>th</sup> and received in the Archives on October 19, 2015.

**Processed by** (583): Jean Grant, November 2015

**Preferred Citation** (524): Richard Boudreau "Apollo Mission Techniques" Documents, 1966-1967 (#2015-0009), University of Houston-Clear Lake Archives.

**Biographical/Historical Note (545)**

Richard Boudreau worked for TRW Houston Operations from 1965-1974 as an engineer and project manager on various tasks supporting the Apollo Spacecraft Program Office (ASPO).

In early 1966, TRW initiated a "Data Priority" effort for ASPO to develop and produce Apollo Mission Techniques, documenting how the many sources of Guidance, Navigation, and Control (GN&C) data were to be used to control the Apollo Spacecraft trajectories.

After the Apollo fire in January 1967 the new ASPO Manager George Low appointed Bill Tindall as "Chief, Apollo Data Priority Coordination". Tindall then led the Mission Techniques efforts for the next two years, until the first lunar landing.

Richard Boudreau was the manager for TRW's Apollo Mission Techniques efforts, from its first beginnings in early 1966 under ASPO manager Dr. Joseph Shea, then under Tindall until the first lunar landing in 1969. Boudreau's TRW's team authored and published all the Apollo Mission Techniques documents that are currently housed in the UHCL Archives within the JSC History Collection. The work was performed as staff support to Bill Tindall.

The Apollo Mission Techniques documents that make up this collection were the first written. They were based upon TRW's initial efforts under Dr. Shea and formed the basis for Bill Tindall's subsequent data priority activities.

(Special thank you to Richard Boudreau for furnishing the above biographical information)

### **Scope and Contents (520)**

This is a collection of three "Apollo Mission Techniques" documents.

The "TRW Rendezvous Study Briefing Charts" contains view charts used in briefing ASPO's Dr. Shea and those MSC organizations responsible for developing the Apollo Lunar Orbit Rendezvous techniques. Studies like this are representative of the early TRW efforts to establish the priority and use of alternate GNC data sources.

The two "Apollo Mission Techniques" Working Papers contain much of the data priority work accomplished before Bill Tindall was appointed ASPO Chief of Apollo Data Priority Coordination. These two documents were the starting point for the extensive Apollo Mission Techniques effort that was continued under Bill Tindall's direction, up until the first moon landing in July 1969.

(Special thank you to Richard Boudreau for furnishing the above scope and content information)

### **Index Terms (6xx):**

Personal Names  
Boudreau, Richard  
Shea, Joseph  
Tindall, Bill

Corporate Names  
Apollo Spacecraft Program Office (ASPO)  
National Aeronautics and Space Administration (NASA)  
NASA Manned Spacecraft Center (MSC)  
TRW Systems, Houston Operations

Subjects  
Apollo Mission Techniques  
Apollo Space Program  
Human Space Exploration

Places  
Houston, Texas

Document Types  
Reports

### **Arrangement (351)**

Documents are arranged chronologically within one box.

**Related Material** (544)

Related "Apollo Mission Techniques" documents are contained within the JSC History Collection currently housed in the UHCL Archives.

**Inventory**

<u>Box</u>	<u>Folder</u>	<u>Title</u>	<u>Dates</u>
1	1	TRW Rendezvous Study Briefing Charts, Project Technical Report, Task ASPO-5A	1966
	2	Apollo Mission Techniques Working Paper	1967
	3	Apollo Mission Techniques (Chapter IV, Lunar Descent)	1967