Guide to the
Howard E. Goldstein
Thermal Protection System Materials Collection, 1970-2011
ARC19.18

NASA Ames Research Center Archives

Contact Information:
NASA Ames Research Center Archives
Mail-Stop 207-1
Moffett Field, CA 94035-1000
Phone: (650) 604-1032
Email: ARC-DL-archives@mail.nasa.gov
URL: https://www.nasa.gov/archives/arc-archives/

Collection processed and finding aid prepared by:
April Gage, September 2025

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Descriptive Summary

Title: Howard E. Goldstein Thermal Protection System Materials Collection, 1970-2011

Collection Number: ARC19.18

Creator: Goldstein, Howard E.

Dates: Inclusive: 1970-2011

Extent: Volume: .7 cubic feet (1 linear foot). 2 letter Hollinger boxes

Repository:
NASA Ames Research Center Archives
Moffett Field, California 94035

Abstract:
Howard Goldstein's papers reflecting his and Ames Research Center's work in developing materials for spacecraft thermal protection systems.

Administrative Information

Access: Restricted Partly; This collection may contain information that has Controlled Unclassified Information relating to proprietary business information and privacy restrictions.

Distribution Limits: Partly Public; NASA employees contact archivist regarding restricted materials.

Publication Rights: This collection may contain copyrighted material. The researcher assumes full responsibility for conforming with the laws of copyright. Securing permission to publish or use materials is the sole responsibility of the researcher.

Languages and Scripts:
All records are in English.

Acquisition Information:
Transferred by Howard E. Goldstein on June 4, 2019 (Acc. 2019-018).

Related Material
Related collections at the Ames Research Center Archives
AFS1070.8A: Archives Reference Collection, 1939-

Scope and Content
This is a small collection of materials accumulated by Ames aerodynamicist and senior scientist Howard Goldstein that he considered to be of historical value. Included are articles, correspondence, patent files for Ames-developed materials and heat shield concepts, historical timelines and summaries, records of achievements and awards, files relating to Goldstein's participation as an expert in a knowledge capture project, Goldstein's curriculum vitae, article clippings, and photographs. The bulk of the documents pertain to thermal protection system materials designed for the Space Shuttle orbiters.

System of Arrangement
This collection is arranged in the creator's original order.

Indexing Terms

The following terms may be used to index this collection.

Corporate Name
Ames Research Center. Thermal Protection Materials Branch

Personal Name
Goldstein, Howard E.

Subjects
Heat Shielding
Thermal Control Coatings
Thermal Protection Systems

Container List

Box	Folder	Title	Scope and Content	Dates
1	1	Accomplishments: Historical Timelines and Summaries (1 of 2)	Includes thermal protection materials development for Space Shuttle Orbiters, contributions to space and planetary entry systems, and technology applications, transfer and spinoffs. Also includes a copy of Howard Goldstein's summary curriculum vitae.	1972 - 2000
1	2	Accomplishments: Historical Timelines and Summaries (2 of 2)		1972 - 2000
1	3	Accomplishments: Awards and Commendations	The bulk of the content in this file pertains to Goldstein's accomplishments.	1976 - 1993
1	4	Clippings (publications and news releases)	Includes a bibliography of fifty Space Technology Division publications from 1959-2003.	1976 - 2003
1	5	Photographs	Most of the photographs are of Goldstein and colleagues receiving awards. Also included is a portrait of Goldstein. Most are prints of official NASA photographs with the associated identification numbers.	1976 - 1985
1	6	Cartoons, Ephemera		undated

1	7	Thermal Protection Materials Branch (Code RTM) Correspondence	Topics include TPS and Space Shuttle, PEGASUS/SWERVE, Flexible External Insulation (FEI), thermocouples, and aerobraking.	1970 - 1991
1	8	Knowledge Capture Project (1 of 2) (This file contains information that has CUI- Proprietary Business Information restrictions.)	Goldstein's file relating to his participation as an expert in a project to capture knowledge of Ames scientists, engineers, and technicians. Includes project description and correspondence, interview questions and answers, technical presentations, notes, and an undated version of Goldstein's summary curriculum vitae.	2004
1	9	Knowledge Capture Project (2 of 2)		2004
1	10	Howard Goldstein Interview for Code TS Oral Living History Project	Scripts for an interview of Goldstein that contain questions and his notes for the answers. (It appears that the Ames Video Group was planning to film the interview.)	2011
2	1	Patent Number 3,952,083 (ARC-10721-1): Silica Reusable Surface Insulation. Goldstein, Smith, Leiser		19760420
2	2	Patent Number 3,955,034: Three-Component Ceramic Coating for Silica Insulation. Pechman, Beasley		19760576
2	3	Patent Number 4,093,771 (ARC-11051-1): Reaction Cured Glass and Glass Coatings. Goldstein, Leiser, Katvala		19780606
2	4	Patent Number 4,148,962 (ARC-11169-1): Fibrous Refractory Composite Insulation. Leiser, Goldstein, Smith		19790410
2	5	Patent Number 4,308,309 (ARC-11310): Adjustable High Emittance Gap Filler. Leiser, Stewart, Smith, Estrella, Goldstein		19811229
2	6	Patent Number 4,312,292 (ARC-11110-1): Spray Coating Apparatus Having a Rotatable Workpiece Holder. Smith, Katvala (Internal name: Double Lazy Susan)		199820126

2	7	Patent Number 4,381,333 (ARC-11164-1): High Temperature Glass Thermal Control Structure and Coating. Stewart, Goldstein, Leiser		19830426
2	8	Patent Number 4,598,007: Light Weight Fire Resistant Graphite Composites. Kourtides, Parker, Ming-Ta.		19860701
2	9	Patent Number 4,713,275 (ARC-11641-1): Ceramic/Ceramic Shell Tile Thermal Protection System and Method Thereof. Riccitiello, Smith, Goldstein, Zimmerman (Internal name: CER/CER Top Hat Patent)		19871215
2	10	Patent Number 4,767,728 (ARC-11649-1-SB): Boron-Containing Organosilane Polymers and Ceramic Materials Thereof. Riccitiello, Ming-Ta, Chen		19880830
2	11	Patent Number 4,824,711 (ARC11652-1): Ceramic Honeycomb Structures and Method Thereof. Cagliostro, Riccitiello.		19890425
2	12	Patent Number 5,038,693 (ARC11907-1NP): Composite Flexible Blanket Insulation. Kourtides, Pitts, Goldstein, Sawko	File contains patent documentation and NASA space act award application for the invention, and associated letter (award not given)	19910813
2	13	Miscellaneous Patents of Interest and Related Material		1979 - 1986