AEROSPACE

STN Database Summary Sheet

STN is operated in North America by Chemical Abstracts Service.

Aerospace (Aerospace and High Technology Database) is a bibliographic database that covers published literature on research and development in over 100 countries in the fields of aerospace and related sciences. Information on basic and applied research in aeronautics, astronautics, and space sciences, as well as technology development and applications in complementary and supporting fields, is included.

Records contain bibliographic information, abstracts, and controlled terms.

There is an online thesaurus for the Controlled Term (/CT) field.

AEROSPACE contains the SELECT CIT feature, which allows you to extract the reference data from the source documents in this file and have them automatically converted to a citation format for searching in SciSearch.

Subject Coverage

- Aerodynamics
- Aerospace
- Aircraft Design and Instrumentation
- Chemistry and Chemical Engineering
- Communications and Navigation
- Electronics and Electrical Engineering
- Engineering
- Environmental Pollution
- Energy Production and Conversion
- Fluid Mechanics and Heat Transfer
- Geosciences
- Lasers and Masers
- Life Sciences
- Materials
- Mathematical and Computer Sciences
- Mechanical Engineering
- Meteorology, Climatology, and Oceanography
- Physics: Solid State, Thermodynamics, Atomic and Molecular, Nuclear and High-Energy, Optics, Acoustics, Plasmas
- Propellants and Fuels
- Quality Assurance and Reliability
- Social Sciences
- Space Sciences
- Spacecraft Design and Systems Engineering
- Structural Mechanics

Sources

- Books
- Collected Works
- Conferences
- Dissertations
- Journals
- Patents
- Preprints
- Reports
- Reprints

File Data

- 1962 to the present
- More than 4.0 million records (6/08)
- Updated monthly with about 2,500 records
- Automatic current-awareness searches (SDIs) are run monthly

User Aids

- Online Helps (HELP DIRECTORY lists all help messages available)
- STNGUIDE

Database Producer

Cambridge Scientific Abstracts
7200 Wisconsin Avenue
Bethesda, MD 20814
USA
Phone: (800) 843-7751
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Fax: (301) 961-6720

In North America
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customer@jaici.or.jp (Customer Service)
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June 2008

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SEARCH and DISPLAY Field Codes

Fields that allow left truncation (/BI, /AB, /TI, /NTE) in this file are indicated by an asterisk (*).

Search Field Name	Search Code	Search Examples	Display Codes
Basic Index * (contains single words from the title (TI), abstract (AB), and controlled term (CT) fields)	None (or /BI)	S COMPUTER-AID? S FCC (L) NASA S LINEAR (S) REGULATOR	AB, CT, TI
Abstract *	/AB	S (?SPACE?(L)CAPSULE)/AB	AB
Accession Number	/AN	S 2005:33003/AN	AN
Application Country	/AC	S US/AC	AI
Application Date	/AD	S 20070815/AD	AI
Application Number	/AP	S US2005-29992/AP	AI
Author (includes inventor)	/AU	S SCUSERIA G?/AU S PHILIPP, WARREN H/AU	AU
Classification Code **(1)** (code and text)	/CC	S L1 AND 32/CC S SPACE COMMUNICATIONS/CC S "METEOROLOGY AND CLIMATOLOGY"/CC	CC
Controlled Term **(2)** (includes major terms)	/CT	S AIR NAVIGATION/CT S *MISSION PLANNING/CT	CT
Controlled Word	/CW	S CYCLE ENGINE#/CW S (BOUNDARY (S) TRANSITION)/CW	CT
Corporate Source **(1)** (includes patent assignee)	/CS	S LEWIS CENTER/CS	AU, CS, PA
Document Number	/DN	S A6310010/DN	DN
Document Type (code and text)	/DT (or /TC)	S B/DT S BOOK/TC	DT
Entry Date **(3)**	/ED	S 20020700-20030800/ED	ED
Field Availability	/FA	S L9 AND AB/FA	Not displayed
File Segment	/FS	S AI/FS	FS
Internation Standard (Document) Number (contains ISBN and ISSN)	/ISN	S 642976848/ISN S 0358-5085/ISN	ISN, ISBN, ISSN, SO
Inventor	/IN	S DAVIS R C/IN S JACKSON, L?/IN	IN
Journal Title	/JT	S JOURNAL OF FLUID MECHANICS/JT	JT, SO
Language (code and text)	/LA	S L2 AND EN/LA	LA
National Patent Classification Code	/NCL	S 102049000/NCL	NCL
Note *	/NTE	S JABLONNA/NTE	NTE
Number of Contract	/NC	S 127-06-17-02/NC	NC, SO
Number of Report	/NR	S NASA-CR-95226/NR	NR, SO
Other Source	/OS	S "0000883(CI)"/OS	OS
Patent Assignee **(1)**	/PA	S WHITNEY/PA	PA, SO
Patent Country (code and text)	/PC	S UNITED STATES/PC S US/PC	PI
Patent Number **(4)**	/PN	S US2956772/PN	PI
Publication Date **(3)**	/PD	S 20040201/PD S FEB 1, 2004/PD S 01 FEB 2004/PD	PI, SO
Publication Year **(3)**	/PY	S 1995-1996/PY	PI, PY, SO
Publisher	/PB	S SPRINGER/PB	PB
Source (contains journal title, report number, contract number, collation information (volume, issue, pagination), publisher, publication date, document source information, ISSN, ISBN, and conference and meeting information)	/SO	S (AEROSPACE SCIENCES(L) MEETING(L)2004)/SO S (MATERIALS SCIENCE AND VOL 7)/SO	SO

SEARCH and DISPLAY Field Codes (cont'd)

Search Field Name	Search Code	Search Examples	Display Codes
Summary Language	/SL	S L1 AND ENGLISH/SL	SL
Title *	/TI	S ORBITAL DEBRIS/TI S (SPACE? (L) LAUNCH?)/TI	TI
Sponsoring Organization (code and text)	/CSS	S CERAMIC SOCIETY?/CSS	CSS
Update Date **(3)**	/UP	S L3 AND UP>=19980600	ED, UP

(1) Search with implied (S) proximity is available in this field.
(2) There is a thesaurus associated with this field.
(3) Numeric search field that may be searched with numeric operators or ranges.
(4) Either STN or Derwent format may be used.

Super Search Fields (1)

Search Field Name	Search Code	Search Examples	Display Codes
Patent Countries (code and text)	/PCS (/PC)	S US/PCS	PC
Patent Number Group **(2)**	/PATS (/PN)	S US2926123/PATS	PN
Limiting Search Codes **(3)**			
Major descriptor	/MAJOR **(4)**	S L15/MAJ	

(1) Enter a super search code to perform a search in one or more fields that may contain the desired information. Super search fields facilitate crossfile and multifile searching. EXPAND may not be used with super search fields. Use EXPAND with the individual field codes instead.
(2) Either STN or Derwent format may be used.
(3) Search results may be restricted to the following search area in AEROSPACE. Only an L-number for an answer set created in AEROSPACE may be limited.
(4) The code may be abbreviated to the first three letters.

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DISPLAY and PRINT Formats

Any combination of formats may be used to display or print answers. Multiple codes must be separated by commas or spaces, e.g., D L1 1-5 TI AB. The fields are displayed or printed in the order requested.

Hit-term highlighting is available for all fields except PY. Highlighting must be ON during SEARCH in order to use the HIT, KWIC, and OCC formats.

Format	Content	Examples
AB	Abstract	D TI AB
AI (AP)	Application Information	D AI
AN **(1)**	Accession Number	D AN
AU	Author (includes inventor and corporate source)	D AU 1-5
CC **(1)**	Classification Code	D L2 2 4 6
CS	Corporate Source (included patent assignee)	D CS
CSS	Sponsoring Organization	D CSS
CT **(1)**	Controlled Term	D CT
DN	Document Number	D DN
DT (TC)	Document Type	D DT
FS	File Segment	D FS
IN	Inventor	D IN PA
ISN **(2)**	International Standard (Document) Number (includes ISSN and ISBN)	D ISN
JT **(2)**	Journal Title	D JT
LA	Language	D LA
NC **(2)**	Number of Contract	D NC
NCL **(1)**	National Patent Classification Code	D NCL
NR **(2)**	Number of Report	D NR
NTE	Note	D NTE
OS	Other Source	D OS
PA	Patent Assignee	D IN PA
PB	Publisher	D PB
PI (PATS, PN) **(3)**	Patent Information	D PI 1-3, 10
PY **(2)**	Publication Year	D PY
SL	Summary Language	D SL
SO	Source (includes NC and NR)	D SO
TI **(1)**	Title	D TI
ALL **(3)**	AN, DN, TI, AU, IN, CS, PA, CSS, PI, AI, SO, NTE, PB, DT, FS, LA, OS, SL, ED, AB, NCL, CC, CT	D ALL
ABS	AB	D ABS
BIB **(3)**	AN, DN, TI, AU, IN, CS, PA, CSS, PI, AI, SO, NTE, PB, DT, FS, LA, SL, OS, ED (BIB is the default)	D L6 BIB;D
CBIB	Compressed bibliographic information	D CBIB
DALL **(3)**	ALL, delimited for post-processing	D 1- DALL
IALL **(3)**	ALL, indented with text labels	D IALL
IBIB **(3)**	BIB, indented with text labels	D IBIB
IND **(1)**	NCL, CC, CT	D IND
SCAN **(4)**	TI, NCL, CC, CT (random display, no answer numbers)	D SCAN
TRIAL (TRI, FREE, SAM) **(1)**	TI, NCL, CC, CT	D TRIAL
HIT	All field containing hit terms	D HIT
KWIC	Hit terms plus 20 words on either side (Key-Word-In-Context)	D KWIC
OCC **(1)**	Number of occurrences of hit terms and fields in which they occur	D OCC

(1) No online display charge for this option.
(2) Custom display only.
(3) By default, patent, application, and priority numbers are displayed in STN format. To display them in Derwent format, enter SET PATENT DERWENT at an arrow prompt. To reset display to STN format, enter SET PATENT STN.
(4) No online display charge for this option. SCAN must be specified on the command line, i.e., D SCAN or DISPLAY SCAN.

Thesaurus Fields

All relationship codes may be used with both the SEARCH and EXPAND command in the Controlled Term (/CT) field.

Relationship Code	Content	Examples
ALL	All Associated Terms (BT, SELF, DA, DEF, NOTE, USE, UF, NT, RT)	E SPACE TRANSPORTATION SYSTEM FLIGHTS+ALL/CT
BT	Broader Terms (BT, SELF, DA, DEF, NOTE)	E STARSPOTS+BT/CT
DA	Entry Date (SELF, DA)	E FLIGHT CONTROL+DA/CT
DEF	Definition (SELF, DEF)	E HANG GLIDERS+DEF/CT
HIE	Hierarchy Terms (All Broader and Narrower Terms) (BT, SELF, DA, DEF, NOTE, NT)	E CATAPULTS+HIE/CT
KT	Keyword Terms (SELF, KT)	S HELIOS+KT/CT
NOTE	Notes (SELF, NOTE)	E BACILLUS+NOTE/CT
NT	Narrower Terms (SELF, DA, DEF, NOTE, NT)	E METEOROLOGICAL SATELLITES+NT/CT
PFT	All Preferred and Forbidden Terms (SELF, UF, USE)	E HYPERSPACES+PFT/CT
RT	Related Terms (SELF, RT)	S HYPERSPACES+RT/CT
STD	All Broader, Narrower and Related Terms (BT, SELF, DA, DEF, NOTE, NT, RT)	E REENTRY VEHICLES+STD/CT
UF	Used For Terms (Forbidden Terms) (SELF, UF)	E THRUST+UF/CT
USE	Use Terms (Preferred Terms) (SELF, USE)	E THRUST POWER+USE/CT

Thesaurus Field Descriptors

Code	Description
SELF (-->)	Controlled Term
BT	Broader Term (includes BT1, BT2, etc.)
DA	Entry Date
DEF	Definition
KT	Keyword Term
NOTE	Note
NT	Narrower Term (includes NT1, NT2, etc.)
RT	Related Term
UF	Used for Term
USE	Use Term

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SELECT, ANALYZE, and SORT Fields

The SELECT command is used to create E-numbers or an L-number containing terms taken from the specified field in an answer set.

The ANALYZE command is used to create an L-number containing terms taken from the specified field in an answer set.

The SORT command is used to rearrange the search results in either alphabetic or numeric order of the specified field(s).

Field Name	Field Code	ANALYZE/ SELECT (1)	SORT
Abstract	AB	Y **(2)**	N
Accession Number	AN	Y	N
Application Counter	AC	Y	Y
Application Date	AD	Y	Y
Application Information	AI	Y	Y
Application Number	AP	Y	Y
Author (Inventor)	AU	Y	Y
Citation	CIT	Y **(3,4)**	N
Classification Code	CC	Y	Y
Corporate Source (Patent Assignee)	CS	Y	Y
Document Number	DN	Y	Y
Document Type	DT	Y	Y
File Segment	FS	Y	Y
International Standard Book Number	ISBN	N	Y
International Standard Serial Number	ISSN	N	Y
International Standard (Document) Number	ISN	Y	Y
Inventor	IN	Y **(4)**	Y
Journal Title	JT	Y	Y
Language	LA	Y	Y
National Patent Classification Code	NCL	Y	Y
Note	NTE	Y	Y
Number of Contract	NC	Y	Y
Number of Report	NR	Y	Y
Occurrence of Hit Terms	OCC	N	Y
Other Source	OS	Y	Y
Patent Assignee	PA	Y	Y
Patent Countries Group	PCS	Y **(5)**	N
Patent Country	PC	Y	Y
Patent Information	PI	Y **(4,6)**	Y
Patent Number	PN	Y	Y
Patent Numbers Group	PATS	Y **(7)**	N
Publication Date	PD	Y	Y
Publication Year	PY	Y **(4)**	Y
Publisher	PB	Y	Y
Source	SO	Y **(8)**	N
Sponsoring Organization	CSS	Y	Y
Summary Language	SL	Y	Y
Title	TI	Y (default)	Y
Treatment Code	TC	Y	Y

(1) HIT may be used to restrict terms extracted to terms that match the search expression used to create the answer set, e.g., SEL HIT RN.
(2) Appends /BI to the terms created by SELECT.
(3) Extracts first author, publication year, volume, and first page with a truncation symbol appended and with /RE appended to the terms created by SELECT.
(4) SELECT HIT and ANALYZE HIT are not valid with this field.
(5) Selects or analyzes the patent country with /PCS appended to the terms created by SELECT.
(6) Selects or analyzes the patent number with /PI appended to the terms created by SELECT.
(7) Selects or analyzes the patent number with /PATS appended to the terms created by SELECT.
(8) Selects or analyzes the ISSN and ISBN with /SO appended to the terms created by SELECT.

Sample Records

DISPLAY IALL

```
ACCESSION NUMBER:   2000:8232  AEROSPACE
DOCUMENT NUMBER:    A0025651
TITLE:              Radargrammetric parameter evaluation of an airborne
                    SAR image
AUTHOR(S):          Wu, Joz,; Lin, De-Chen, (National Central Univ.,
                    Chung-Li, Taiwan)
CORPORATE SOURCE:   National Central Univ., Chung-Li, Taiwan (Wu; Lin).
SOURCE:             PE&RS - Photogrammetric Engineering & Remote Sensing,
                    Vol. 66, No. 1., pp. 41-47. (Jan 2000).
                    Available from: AIAA Dispatch; Voice: 800 662 1545,
                    Fax: 816 926 8794, E-Mail: dispatch@aiaa.org..
                    ISSN: 0099-1112
DOCUMENT TYPE:      Journal; Article (Journal Article)
FILE SEGMENT:       Aerospace & High Technology
LANGUAGE:           English
ENTRY DATE:         Entered STN:  12 Jun 2000
                    Last Updated on STN:  15 Oct 2002
ABSTRACT:
Digital synthetic aperture radar (SAR) images are composed of lines
oriented along-track and pixels in a cross-track direction. Because of the
motion of a SAR platform, the flight position and velocity parameters have
time-dependent characteristics. Our objective consists in devising a model
for the position/velocity parameters, then incorporating the model into
radargrammetric data processing. The interpolative parameter model is
based on a linear prediction method with filtering. For a monoscopic
airborne SAR image having a 12.0-km swath width and a 9.0-km along-track
distance at an altitude of about 7.1-km, the positional root-mean-square
errors are calculated using the ground coordinates available at 15
independent checkpoints. Taking into account any model inadequacy, the
errors inherent in the SAR image forming, and the image point measurement
errors, the position accuracy values amount to +/- 1.5, +/- 1.5 pixels
horizontally and +/- 1.2 pixels vertically. (Author)
CLASSIFICATION:     32 COMMUNICATIONS (AH)
CONTROLLED TERM:    *RADAR IMAGERY; TRANSFORMATIONS (MATHEMATICS);
                    PIXELS; SYNTHETIC APERTURE RADAR; ERROR ANALYSIS;
                    *AIRBORNE RADAR
```

DISPLAY IND

```
IC   B01D017-06
NCL  210/748.000; 55/277.000; 210/767.000; 210/806.000; 406/197.000
CC   25 Inorganic and Physical Chemistry
CT   *ACOUSTICS; *CLASSIFIERS; *FRACTIONATION; *SEPARATION; ACOUSTIC
     FREQUENCIES; PATENTS; RESONANCE; RESONANT FREQUENCIES; SOUND
     TRANSDUCERS; SOUND WAVES
```

EXPAND in /CT Thesaurus

```
=> E BODIES OF REVOLUTION+ALL/CT
E1          406   BT1  SYMMETRICAL BODIES/CT
E2         4154     --> BODIES OF REVOLUTION/CT
                      DA   1988
                      DEF  Symmetrical bodies having the form described by
                           rotating a plane curve about an axis in its
                           plane.
E3         2365       NT1  CONICAL BODIES/CT
E4          500         NT2  SLENDER CONES/CT
E5         8909       NT1  CYLINDRICAL BODIES/CT
E6         1659         NT2  ROTATING CYLINDERS/CT
E7          495       NT1  PARABOLIC BODIES/CT
E8           26       NT1  POWER LAW BODIES/CT
E9         7447       NT1  SPHERES/CT
E10         242         NT2  CELESTIAL SPHERE/CT
E11          70         NT2  CONCENTRIC SPHERES/CT
E12         186         NT2  FALLING SPHERES/CT
E13         296         NT2  POINCARE SPHERES/CT
E14         626         NT2  ROTATING SPHERES/CT
E15         737       NT1  TORUSES/CT
E16        7211       RT   AERODYNAMIC CONFIGURATIONS/CT
E17       23224       RT   AERODYNAMICS/CT
E18        1519       RT   AXES OF ROTATION/CT
E19        2827       RT   AXISYMMETRIC BODIES/CT
E20          39       RT   BODIES/CT
E21        1117       RT   CONES/CT
E22        2142       RT   DISKS (SHAPES)/CT
E23        2074       RT   ELLIPSOIDS/CT
E24         646       RT   FINNED BODIES/CT
E25        7477       RT   GEOMETRY/CT
E26         328       RT   HEMISPHERES/CT
E27         247       RT   HEMISPHERICAL SHELLS/CT
E28         551       RT   OGIVES/CT
E29        1398       RT   RINGS/CT
E30        3111       RT   SPHERICAL SHELLS/CT
E31         236       RT   STREAMLINED BODIES/CT
*********  END  *********
```