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Transportation Environment Data Bank Index

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TRANSPORTATION ENVIRONMENT DATA BANK INDEX

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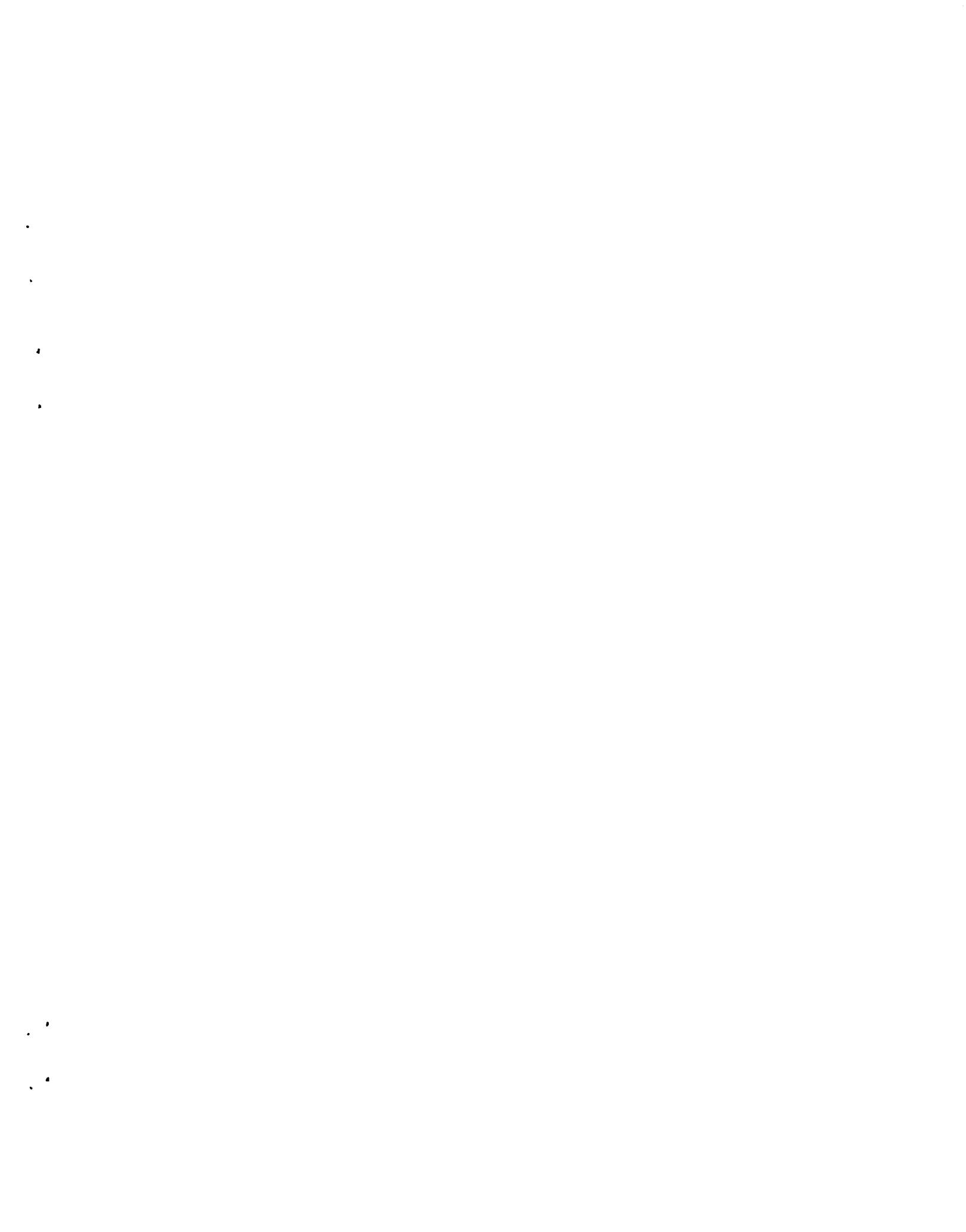
ABSTRACT

In an effort to determine the environment intensities to which energy materials in transit will be exposed, a "Data Bank" of environmental information has been established by Sandia Laboratories, Division 1285 for the ERDA Division of Environmental Control Technology. This document is an index which can be used to request data of interest.

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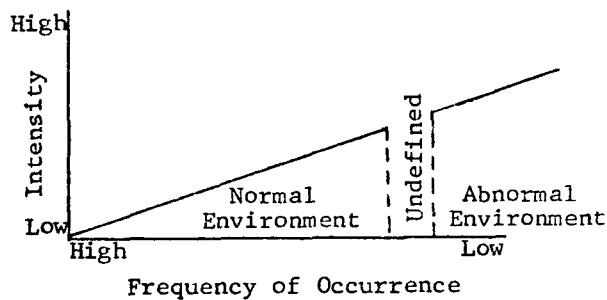


TRANSPORTATION ENVIRONMENT DATA BANK INDEX

Introduction

The purpose of the Transportation Environment Data Bank is to store and make available descriptions of the environment of transportation expressed in engineering terms. The data are intended to provide environmental criteria to shipping container design and test engineers as a basis for their functions. The Transportation Environment Data Bank is a segment of a larger ERDA/DOD environmental Data Bank for weapons application.

For purposes of indexing and data retrieval, the data are catalogued under two major headings: Normal and Abnormal Environments. The diagram below illustrates the relationship between these environmental designations.



Normal environments are those which will be encountered at some level during every shipment. They have a high frequency of occurrence, but a relatively low intensity. The abnormal or accident environments, on the other hand, are characterized by higher intensities but lower frequency of occurrence. The very high intensities of environment occur very infrequently. The abnormal environments, while often called by different names to differentiate them, have actually the same engineering parameters as the normal. Thus, an acceleration is experienced by cargo as a truck crosses railroad tracks at 50 mph. A greater acceleration may result if it strikes a bridge abutment at the same speed. To make the difference clear in a succinct manner, the latter is termed, "impact." These short descriptions are shown in the index in parentheses where they apply.

The Environments

Twelve categories of environment have been identified as relevant to transportation. These include:

- | | |
|-------------------------|-------------------|
| 1. Acceleration/Time * | 7. Pressure * |
| 2. Acoustic Noise | 8. Radiation * |
| 3. Atmospheric Contents | 9. Shock * |
| 4. Fragmentation * | 10. Temperature * |
| 5. Humidity | 11. Vibration |
| 6. Precipitation | 12. Wind * |

Three factors operate to limit the number of these environments for which abnormal levels require consideration:

1. Some environments reach an absolute limit regularly, and the limit thus is within the normal range;
2. The abnormal aspects of some of them are encountered so infrequently as to be of little interest; and
3. Protection against the effects of some environments include protection against the abnormal.

After eliminating from consideration those listed environments falling within the above limitations, only the environments indicated by an asterisk in the above list are of interest in the abnormal considerations. Figure 1 presents the environments which relate to transportation and the details of the abnormal environments as to input and response.

Input may be defined as the environmental level which exists at the cargo interface, while response is considered as the way in which the cargo reacts to the environments. As an example, consider the pressure environment. Pressure has both normal and abnormal levels. The normal, which all cargo will experience, includes the variations in atmospheric pressure at a specific location, as well as the variations produced by changes in elevation, both on the earth's surface and while flying. The abnormal aspects of the pressure environment are the result of exposure to an explosion or to immersion (inputs); if the intensity level of input is sufficiently high, a crush response of the cargo will result.

Four of the environments are considered only in the normal aspects for reasons mentioned above. One environment, fragmentation, is considered only in the abnormal aspect. This is because no elements which will cause puncture to the cargo are present under normal conditions, i.e., will be encountered frequently during transportation.

* Environments with both normal and abnormal aspects.

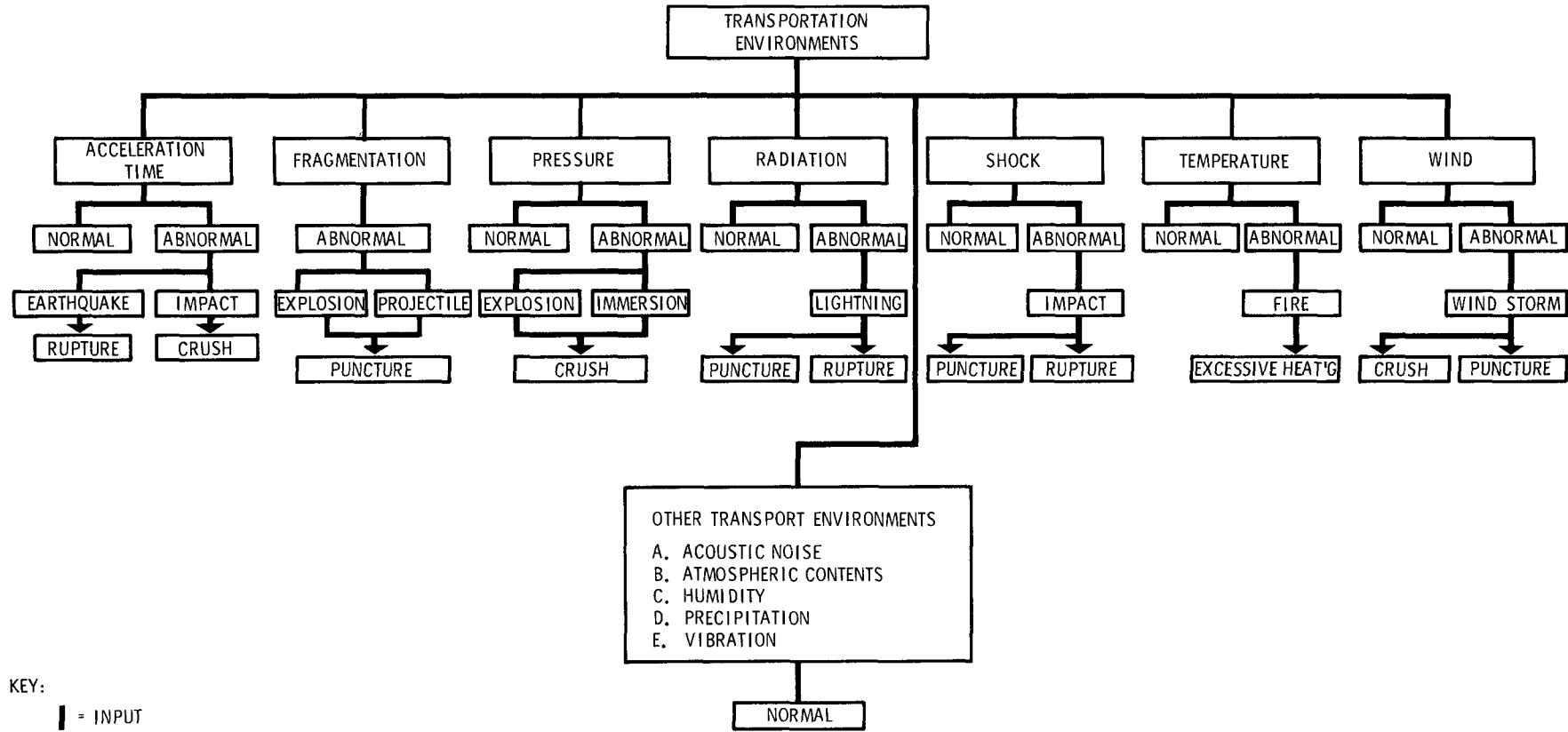


Figure 1. Structure of the Transportation Environment Data Bank

The Data

Both input and response data contained in the Transportation Environment Data Bank relating to the normal environments are measured data. They were obtained from reliable sources, both within Sandia Laboratories and from other reputable agencies. When data were required, but not available, the Data Bank operators arranged for measurements to provide the information.

Most input data in the Data Bank under the heading of Abnormal Environments, however, were not measured directly. Because of the number and randomness of occurrence and type, it is impossible to provide engineering instrumentation for measurement. If an instrumented vehicle is subjected to a staged accident, it represents only the one type of event. Therefore, it is necessary to use statistical techniques to characterize the range of environmental intensities which may be experienced by cargo in accidents. The data to which these techniques are applied are often estimated. The basic data which are most useful to estimate abnormal inputs include the following.

Abnormal Input	Useful Data Parameters
1. Earthquake	Time History
2. Impact	Vehicle Velocity
3. Explosion	Pressure or Missile Velocity, Radius of Missile Travel
4. Projectile/Impalement	Package Velocity, Radius of Probe
5. Immersion	Depth
6. Lightning	Voltage, Amperage, Rise Time, etc.
7. Fire	Temperature, Heat Flux and Duration
8. Windstorm	Velocity, Pressure Differential

It is these types of data, or information which permit the derivation of these values, which are stored in the input section of the Abnormal Environment part of the Transportation Environment Data Bank. The response section of the Bank is expressed in terms of damage to cargo. Since the damage can be described and measured, measurements and descriptions are included wherever possible.

Mechanics of the Data Bank

The data which have been retrieved and entered in the Data Bank are on microfilm. Two forms of microfilm are used: aperture cards and microfiche. Facilities for viewing the data and obtaining hard copy are located at the bank site. When processing large requests for information, the Bank's operators have access to automated means for obtaining hard copy.

The two-part number listed after the title of a particular Data Bank entry is the access number for the data file. The first number, e.g., 1614, is the file number. The number after the dash (-) is the number of file cards available on the subject. Requests for hard copies of data

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should cite these two numbers. For large data requests, it is faster and cheaper for the data bank operators to transmit the data to the requestor in the form of duplicate microfilm aperture cards or duplicate microfiche. If the requestor has facilities for reading information in these formats, it should be so stated in the request.

When either raw data or published information is acquired, it is reviewed for engineering data content. Pertinent information is then extracted, collated, and microfilmed. The data cards and/or microfiche are filed in numerical order without regard to subject. This simple technique is possible because of a computerized indexing and retrieval program which was developed for efficient use of the Data Bank.

The use of a computer-aided system makes it possible to obtain a more flexible file, permits more complete data retrieval, shortens the time necessary for search, and makes feasible more frequent publication of a current index.

Data Sources

Normal environmental information for inclusion in the Data Bank is acquired by the Data Bank's operators from many sources. Military agencies, such as Aberdeen Proving Ground, Wright Air Development Center, Naval Ordnance Test Center, and Army QM R&E Center, and industrial groups, such as railroads, aircraft companies, and trucking concerns, have contributed information. A considerable portion of the information has been obtained from various project groups within Sandia Laboratories. The Data Bank's operators not only extract information from published sources, but engage in specific research activities to obtain data not otherwise available.

Abnormal environmental information is obtained primarily from U. S. Department of Transportation sources and reports produced by the National Transportation Safety Board. Contacts have been established with various individuals and agencies responsible for accident investigation in the various modes of transportation. An information sources file is maintained as an adjunct to the Bank which integrates this Data Bank's efforts with other Data Banks collecting related accident information such as accident rates, fatalities, etc.

Availability of the Data

The information in the Data Bank is available, within the limits of time, workload, and security regulations, to any requestor. Requests for data should be sent to Division 1285, Sandia Laboratories, Albuquerque, New Mexico, 87115. The request should either outline the specific area for which information is desired, or it should list specific entries, including serial numbers. Requests will be processed as time allows. Agencies outside of the ERDA complex will be furnished information subject to the review and release procedures established by the ERDA.

The Index

The index provided on the following pages is what the Bank's operators call a category index. Entry is made into this index by finding the environmental category of interest, such as shock, temperature, vibration, etc. The 12 categories are listed alphabetically.

Normal Environments

.....ACCELERATION/TIME.....INPUT.....TRANSPORTATION.....AIRCRAFT.....

LOADS IMPOSED ON CARGO BY FLIGHT AND LANDING	UNC	00750-001+
MANEUVER LOAD DATA C-130 AIRCRAFT	UNC	00944-002+
FATIGUE DAMAGE PARAMETERS, TRANSPORT AIRCRAFT	UNC	01085-001+
GUST LOAD FREQUENCY, AIRCRAFT FLIGHTS, 40-45 KILOFEET, IN STORM	UNC	01087-002+
AIRCRAFT RECORDINGS DURING A TURBULENCE INCIDENT	UNC	01090-001+

.....ACCELERATION/TIME.....INPUT.....TRANSPORTATION.....SHIP.....

ACCELERATION, SHIP MOTIONS, MAXIMUM	UNC	00739-001+
ACCELERATIONS ON PACKAGES STORED IN SHIPS HOLDS	UNC	00740-001+
ACCELERATION, EXPECTED PEAK VALUES, MARINE	UNC	00741-001+
SHIP MOTIONS, SS SILVER MARINER, NEW YORK-BREMERHAVEN, GERMANY	UNC	00746-001+
SHIP MOTIONS, T-2 TANKER, ESSO ASHVILLE, NORMAL OPERATIONS	UNC	00747-001+
WAVE HEIGHT DISTRIBUTION - ATLANTIC COAST	UNC	01573-004+

.....ACCELERATION/TIME.....RESPONSE....TRANSPORTATION.....AIRCRAFT.....

GUST LOAD FREQUENCY, AIRCRAFT FLIGHTS, 40-45 KILOFEET, IN STORM	UNC	01087-002+
AIRCRAFT RECORDINGS DURING A TURBULENCE INCIDENT	UNC	01090-001+

(IMPACT)ACCELERATION/TIME.....INPUT.....GENERAL.....SHIP.....

HYDRODYNAMIC ASPECT OF DYNAMIC DRILL SHIP POSITIONING	UNC	01981-020+
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(IMPACT)ACCELERATION/TIME.....INPUT.....GENERAL.....OTHER.....

APPROXIMATE DURATION OF SOME SHORT ACCELERATION LOADS	UNC	00734-001+
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(IMPACT)ACCELERATION/TIME.....INPUT.....TRANSPORTATION.....AUTOMOBILE.....

TRACTOR/TRAILER TRANSPORT, 3 TYPES SUSPENSION SYSTEM	UNC	01988-005+
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.....ACOUSTIC NOISE.....INPUT.....TRANSPORTATION.....AIRCRAFT.....

SOUND PRESSURE LEVEL VS ANGLE AT 200 FEET, C124, 2 ENGINES UP	UNC	00612-001+
SOUND PRESSURE LEVEL VS ANGLE AT 200 FEET, C124, 3 ENGINES UP	UNC	00613-001+
OVERALL SOUND PRESSURE LEVEL VS ANGLE, C124, VARIOUS CONDITION	UNC	00614-001+
SOUND PRESSURE LEVEL, AVERAGE, COMPARISON OF C133A AND C124	UNC	00615-001+
COMPARISON OF C118, C124, C133A AND MIL-A-8806 SPL IN COCKPIT	UNC	00616-001+
SOUND PRESSURE LEVEL, OVERALL, CABIN, C133 AIRCRAFT	UNC	00617-001+
NOISE LEVELS IN VICINITY OF JET ENGINES AND NEAR 4-ENGINE AC	UNC	00618-001+
SOUND PRESSURE LEVEL, OVERALL, FOR SIX TURBOJET AIRCRAFT, 100FT	UNC	00619-001+
SOUND PRESSURE LEVEL, OVERALL, FOR 5 TURBOJET AIRCRAFT, 200 FT	UNC	00620-001+
SOUND PRESSURE LEVEL, OVERALL, FOR 4 TURBOJET AIRCRAFT, 400 FT	UNC	00621-001+
SOUND PRESSURE LEVEL, OVERALL, 2 TURBOJET A/C, WITH AFTERBURNER	UNC	00622-001+
SOUND PRESSURE LEVEL, OVERALL, MAXIMUM, 4 USAF TURBOJET A/C	UNC	00623-001+
NOISE SPECTRUM OF TURBOJET WITH AFTERBURNER	UNC	00827-001+
NOISE, HH43 HELICOPTER, TAKEOFF, HOVER, LANDING	UNC	01564-001+

.....ACOUSTIC NOISE.....INPUT.....TRANSPORTATION.....AUTOMOBILE.....

CONTROL OF HIGHWAY NOISE	UNC	01134-003+
ACOUSTIC NOISE SOURCES, TRUCK	UNC	01606-001+
NOISE, TRANSPORTATION, SURFACE AND AIR	UNC	01624-001+

.....ACOUSTIC NOISE.....INPUT.....TRANSPORTATION.....RAILROAD.....

ACOUSTIC NOISE SOURCES, TRAIN	UNC	01939-005+
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.....ACOUSTIC NOISE.....INPUT.....UTILIZATION.....AUTOMOBILE.....

SURVEY TRUCK NOISE LEVELS AND THE EFFECT OF REGULATION	UNC	02025-001+
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..ATMOSPHERIC CONTENTS.....INPUT.....GENERAL.....OTHER.....

ENVIRONMENT CONDITIONS PREVAILING DURING TRANSIT	UNC	00078-001+
SALT SPRAY PARTICLES IN AIR,DISTRIBUTION,CONCENTRATION,SIZE	UNC	00274-001+
SAND AND DUST-CHARACTERISTICS	UNC	01274-002+

..ATMOSPHERIC CONTENTS.....INPUT.....STORAGE.....OTHER.....

AIRBORNE PARTICULATES	UNC	01568-001+
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..ATMOSPHERIC CONTENTS.....INPUT.....TRANSPORTATION.....AIRCRAFT.....

SAND/DUST IN HELICOPTER/VSTOL A/C FLIGHTS	UNC	01084-005+
FREQUENCY OF OCCURENCE OF AIRCRAFT ICING PARAMETERS	UNC	01089-002+

..ATMOSPHERIC CONTENTS.....INPUT.....TRANSPORTATION.....SHIP.....

SEA SALT ENVIRONMENT ON DECK AT SEA	UNC	01179-002+
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.....HUMIDITY.....INPUT.....GENERAL.....OTHER.....

ENVIRONMENT CONDITIONS PREVAILING DURING TRANSIT	UNC	00078-001+
HUMIDITY,RELATIVE,IN DESERT,TROPICS,ARCTIC AND IN SHIPHOLDS	UNC	00229-001+
HUMIDITY EXTREMES,PROBABLE,FOR STORAGE AND TRANSIT	UNC	00230-001+

.....HUMIDITY.....INPUT.....TRANSPORTATION.....SHIP.....

TEMPERATURES AND RELATIVE HUMIDITY,SHIP HOLD	UNC	00058-001+
HUMIDITY,RELATIVE,ABOARD SHIP	UNC	00232-001+

.....PRECIPITATION.....INPUT.....GENERAL.....OTHER.....

ENVIRONMENT CONDITIONS PREVAILING DURING TRANSIT RAINFALL,AVERAGE RATES OF	UNC	00078-001+
HAILSTONES,SIZE,TERMINAL VELOCITIES,DISTRIBUTION OF HAIL,FREQUENCY AND DISTRIBUTION OF,FLIGHT THRU THUNDERSTORM	UNC	00250-001+
ELECTROSTATIC FIELDS IN THE ATMOSPHERE	UNC	00459-002+
RAINFALL INTENSITY,FREQUENCY,U.S.,50 STATES,PORTO RICO	UNC	01113-029+
HAILSTONE EXTREMES	UNC	01513-001+
GLAZE ICE, WIND LOADS AT EARTHS SURFACE	UNC	01722-001+

.....PRECIPITATION.....INPUT.....TRANSPORTATION.....AIRCRAFT.....

STATIC ELECTRICITY ACCUMULATION ON HELICOPTERS FREQUENCY OF OCCURENCE OF AIRCRAFT ICING PARAMETERS	UNC	00463-001+
	UNC	01089-002+

.....PRECIPITATION.....INPUT.....TRANSPORTATION.....OTHER.....

RAINFALL INTENSITY, DURATION, HAWAII	UNC	01761-001+
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.....PRESSURE.....INPUT.....GENERAL.....OTHER.....

PRESSURE,TYPICAL DAILY VS TIME OF DAY BAROMETRIC VALUES,MAXIMUM NORMAL VARIATION,UNITED STATES	UNC	00140-001+
	UNC	00143-001+

.....PRESSURE.....INPUT.....TRANSPORTATION.....AIRCRAFT.....

PRESSURE CHANGES,ATMOSPHERIC,AIRCRAFT CARGO HOLDS PERFORMANCE AND LOADING-C130B	UNC	00147-001+
PERFORMANCE AND LOADING-C133A	UNC	00148-001+
FLIGHT PROFILE,NORMAL,C133 CARGO AIRCRAFT	UNC	00149-001+
FLIGHT PROFILE,NORMAL,C124 CARGO AIRCRAFT	UNC	00150-001+
	UNC	00151-001+

.....RADIATION.....INPUT.....GENERAL.....OTHER.....

ENVIRONMENT CONDITIONS PREVAILING DURING TRANSIT TEMPERATURE,EXTREMES/DURATION,FOR STORAGE,HANDLING,TRANSPORT ELECTROSTATIC FIELDS IN THE ATMOSPHERE	UNC	00078-001+
STATIC ELECTRICITY-ELECTRICAL CHARACTERISTICS OF ATMOSPHERE	UNC	00080-002+
RADIATION,SOLAR,AT EARTH S SURFACE AND ATMOSPHERE S EDGE	UNC	00459-002+
RADIATION DATA,SOLAR	UNC	00460-002+
RADIATION,MEAN DAILY TOTAL,FLAT SURFACE,LOCATIONS,US/CANADA	UNC	00479-003+
INSOLATION,MONTHLY MAPS OF MEAN DAILY,FOR THE UNITED STATES	UNC	00480-001+
LIGHTNING CHARACTERISTICS	UNC	00495-004+
	UNC	00831-006+
	UNC	01107-009+

.....RADIATION.....INPUT.....TRANSPORTATION.....AIRCRAFT.....

STATIC ELECTRICITY ACCUMULATION ON HELICOPTERS UNC 00463-001+
HELICOPTER STATIC ELECTRICITY MEASUREMENTS UNC 00503-003+

.....RADIATION.....INPUT.....TRANSPORTATION.....RAILROAD.....

TEMPERATURE, INTERNAL AIR, RAILROAD BOXCAR IN DESERT UNC 00056-001+

(LIGHTNING)RADIATION.....INPUT.....TRANSPORTATION.....AIRCRAFT.....

LIGHTNING HAZARD TO AIRCRAFT UNC 01415-006+

.....SHOCK.....INPUT.....HANDLING.....OTHER.....

SHOCK MEASUREMENTS, DOCKSIDE/SHIPBOARD HANDLING UNC 00335-001+
PACKAGE DROPPED ON EARTH, WOOD AND CONCRETE FLOORS UNC 00337-001+
PACKAGES, TREATMENT OF DURING HANDLING UNC 00343-001+
SHOCK ZONES REGISTERED IN CARGO DURING HANDLING UNC 00814-001+
SUMMARY, DYNAMIC ENVIRONMENT, FORKLIFT TRUCKS UNC 01744-031+
SHOCK, VIBRATION, 2000 LB FORKLIFT TRUCK (SEE 1744) UNC 01745-046+
SHOCK, INPUT, 3000 LB FORKLIFT TRUCK (SEE 1744) UNC 01746-057+
SHOCK, INPUT, 4000LB FORKLIFT TRUCK (SEE 1744) UNC 01749-058+
SHOCK, VIBRATION, 7000 LB FORKLIFT TRUCK (SEE 1744) UNC 01752-041+

.....SHOCK.....INPUT.....TRANSPORTATION.....AIRCRAFT.....

DYNAMIC ENVIRONMENT, TURBOJET CARGO AIRCRAFT UNC A1533-002+
SHOCK DATA, AIRCRAFT/CARGO/ UNC 00334-001+
SHOCK ZONES REGISTERED IN AIR CARGO TESTS DURING FLIGHT UNC 00336-001+
SHOCK, CSA CARGO FLOOR, (SEE 1439) UNC 01444-042+

.....SHOCK.....INPUT.....TRANSPORTATION.....AUTOMOBILE.....

SHOCK DATA-TRUCKS UNC 00311-001+
SHOCKS FROM ROAD IRREGULARITIES AND TOWBAR SNATCH UNC 00314-001+
SHOCK AND VIBRATION ENVIRONMENT IN COMMERCIAL TRUCKS/TRAILER UNC 00315-001+
ENVIRONMENT IN VEHICLES TRAVELING OVER PAVED ROADS UNC 00317-001+
VIBRATION-ACCELERATIONS IN HIGHWAY OPERATION OF TRUCKS UNC 00370-001+
SHOCK ZONES REGISTERED IN CARGO DURING SURFACE TRANSFER UNC 00813-001+
DYNAMIC ENVIRONMENT ON A FLAT BED TRACTOR/TRAILER (AEC/DOD) UNC 01006-008+
FINAL ANALYSIS, AEC/DOD FLATBED TRUCK TEST UNC 01083-041+
VIBRATION/SHOCK, 2 1/2 TON TRUCK UNC 01264-008+
VIBRATION/SHOCK AIR SUSPENSION VAN UNC 01277-006+
SHOCK/VIBRATION SUMMARY, UNION CARBIDE TRUCK TEST UNC 01312-007+
SHOCK DATA, UNION CARBIDE TRUCK TEST UNC 01314-013+
TRACTOR/TRAILER TRANSPORT, 3 TYPES SUSPENSION SYSTEM UNC 01988-005+

.....SHOCK.....INPUT.....TRANSPORTATION.....RAILROAD.....

RAIL HUMP SHOCK CRITERIA SUMMARY	UNC	A1202-004+
BOXCAR SHOCK CRITERIA SUMMARY	UNC	B1203-002+
ATMX CAR SHOCK CRITERIA SUMMARY	UNC	B1210-002+
SHOCK/VIBRATION ENVIRONMENT SUMMARY, RAIL TRANSPORT	UNC	B1320-011+
SHOCK SPECTRA SUMMARY,SIX-ATMX CAR TRAIN	UNC	C1215-012+
SPEEDS,SWITCHING,OBSERVED AT VARIOUS HUMP YARDS	UNC	00284-001+
SPEEDS,SWITCHING,OBSERVATION OF,AT ILLINOIS CENTRAL RR YARDS	UNC	00285-004+
SPEEDS,SWITCHING,OBSERVED	UNC	00286-001+
SHOCK,SWITCHING,RAIL,OCCURRANCE OF	UNC	00287-001+
SPEED,SWITCHING,DATA COMPARED WITH NEW DATA,NY CENTRAL RR	UNC	00288-001+
SPEED,HUMPING,FREQUENCY OF IMPACTS AT VARIOUS	UNC	00289-001+

.....SHOCK.....INPUT.....TRANSPORTATION.....RAILROAD.....

RAIL SWITCHING AND HUMPING OPERATIONS	UNC	00290-001+
SHOCK DATA,RAILROAD SWITCHING	UNC	00293-002+
SHOCK DATA,RAILROAD SWITCHING	UNC	00294-002+
SHOCK DATA,RAILROAD SWITCHING	UNC	00295-002+
SHOCK DATA,RAIL	UNC	00296-001+
SHOCK DATA,RAIL/BOXCAR/	UNC	00297-001+
SHOCKS IN TRAINS WHEN STOPPING,STARTING AND SWITCHING	UNC	00300-001+
SHOCK,RAILROAD HUMPING	UNC	00302-005+
RAILROAD SWITCHING TEST OF SPECIAL RAIL CAR ATMX 500	UNC	00304-002+
RAIL HUMPING TEST,500 SERIES ATMX CAR	UNC	00305-008+
IMPACT SPEED VS HORIZONTAL TRAVEL OF STRUCK EMPTY CAR	UNC	00309-001+
VIBRATION ENVIRONMENT PRODUCED DURING RAIL TRANSPORT	UNC	00366-001+
SHOCK, RAIL HUMPING 3.4 TO 10 MPH, 3 DIRECTIONS	UNC	01033-010+
SHOCK RAIL HUMP SPECIAL DRAFT CAR, TO 12MPH LONGITUDINAL	UNC	01034-004+
SHOCK SPECTRA,BOXCAR, LONGITUDINAL AXIS	UNC	01204-057+
SHOCK SPECTRA,BOXCAR,VERTICAL AXIS	UNC	01205-064+
SHOCK SPECTRA,BOXCAR,LATERAL AXIS	UNC	01206-059+
SHOCK SPECTRA,SERIES 500 ATMX CAR, LONGITUDINAL AXIS	UNC	01211-081+
SHOCK SPECTRA,SERIES 500 ATMX CAR, VERTICAL AXIS	UNC	01212-053+
SHOCK SPECTRA,500 SERIES ATMX CAR, LATERAL AXIS	UNC	01213-018+
SHOCK SPECTRA,SERIES 600 ATMX CAR, ALL AXES	UNC	01214-035+
SHOCK SPECTRA,HAMMER CAR,SIX-ATMX CAR TRAIN	UNC	01216-098+
SHOCK SPECTRA,1ST STRUCK CAR,SIX-ATMX CAR TRAIN	UNC	01217-028+
SHOCK SPECTRA,2ND STRUCK CAR, SIX-ATMX CAR TRAIN	UNC	01218-015+
SHOCK SPECTRA,3RD STRUCK CAR, SIX-ATMX CAR TRAIN	UNC	01219-085+
SHOCK SPECTRA,4TH STRUCK CAR,SIX-ATMX CAR TRAIN	UNC	01220-015+
SHOCK SPECTRA,5TH STRUCK CAR, SIX-ATMX CAR TRAIN	UNC	01221-015+
SHOCK/VIBRATION SUMMARY,UNION CARBIDE RAIL TEST	UNC	01315-007+
SHOCK DATA,UNION CARBIDE RAIL TEST	UNC	01317-033+
SWITCHING SHOCK,CUSHION UNDERFRAME BOXCAR	UNC	01326-055+
SPEEDS, RAIL SWITCHING, DISTRIBUTION	UNC	01638-001+

.....SHOCK.....INPUT.....TRANSPORTATION.....SHIP.....

SHOCK SPECTRA,SHIP,TYPICAL ACCELERATION IN CARGO SHIPS DURING MANEUVERS	UNC	00333-001+
	UNC	01133-003+

.....SHOCK.....INPUT.....TRANSPORTATION.....OTHER.....

SUMMARY, DYNAMIC ENVIRONMENT OF TRANSPORTATION - 1973	UNC	A1354-018+
SHOCK AND ACCELERATION DATA FOR VARIOUS MEANS OF TRANSPORT	UNC	00344-001+
SHOCK + VIBRATION DATA OBTAINED FROM TRUCK + RAIL SHIPMENT	UNC	01003-006+

.....SHOCK.....RESPONSE.....HANDLING.....OTHER.....

SUMMARY, DYNAMIC ENVIRONMENT, FORKLIFT TRUCKS	UNC	01744-031+
SHOCK,VIBRATION, 2000 LB FORKLIFT TRUCK (SEE 1744)	UNC	01745-046+
SHOCK,RESPONSE, 3000 LB FORKLIFT TRUCK (SEE 1744)	UNC	01747-057+
SHOCK,RESPONSE,4000LB FORKLIFT TRUCK (SEE 1744)	UNC	01750-058+
SHOCK, VIBRATION, 7000 LB FORKLIFT TRUCK (SEE 1744)	UNC	01752-041+

.....SHOCK.....RESPONSE....TRANSPORTATION.....AUTOMOBILE.....

SHOCK/VIBRATION SUMMARY,UNION CARBIDE TRUCK TEST	UNC	01312-007+
SHOCK DATA,UNION CARBIDE TRUCK TEST	UNC	01314-013+

.....SHOCK.....RESPONSE....TRANSPORTATION.....RAILROAD.....

RAIL HUMP SHOCK CRITERIA SUMMARY	UNC	A1202-004+
BOXCAR SHOCK CRITERIA SUMMARY	UNC	B1203-002+
ATMX CAR SHOCK CRITERIA SUMMARY	UNC	B1210-002+
SHOCK/VIBRATION ENVIRONMENT SUMMARY, RAIL TRANSPORT	UNC	B1320-011+
SHOCK SPECTRA SUMMARY,SIX-ATMX CAR TRAIN	UNC	C1215-012+
SHOCK SPECTRA,BOXCAR, LONGITUDINAL AXIS	UNC	01204-057+
SHOCK SPECTRA,BOXCAR,VERTICAL AXIS	UNC	01205-064+
SHOCK SPECTRA,BOXCAR, LATERAL AXIS	UNC	01206-059+
SHOCK SPECTRA,SERIES 500 ATMX CAR, LONGITUDINAL AXIS	UNC	01211-081+
SHOCK SPECTRA,SERIES 500 ATMX CAR, VERTICAL AXIS	UNC	01212-053+
SHOCK SPECTRA,500 SERIES ATMX CAR, LATERAL AXIS	UNC	01213-018+
SHOCK SPECTRA,SERIES 600 ATMX CAR, ALL AXES	UNC	01214-035+
SHOCK SPECTRA,HAMMER CAR,SIX-ATMX CAR TRAIN	UNC	01216-098+
SHOCK SPECTRA,1ST STRUCK CAR,SIX-ATMX CAR TRAIN	UNC	01217-028+
SHOCK SPECTRA,2ND STRUCK CAR, SIX-ATMX CAR TRAIN	UNC	01218-015+
SHOCK SPECTRA,3RD STRUCK CAR, SIX-ATMX CAR TRAIN	UNC	01219-085+
SHOCK SPECTRA,4TH STRUCK CAR,SIX-ATMX CAR TRAIN	UNC	01220-015+
SHOCK SPECTRA,5TH STRUCK CAR, SIX-ATMX CAR TRAIN	UNC	01221-015+
SHOCK/VIBRATION SUMMARY,UNION CARBIDE RAIL TEST	UNC	01315-007+
SHOCK DATA,UNION CARBIDE RAIL TEST	UNC	01317-033+
SWITCHING SHOCK,CUSHION UNDERFRAME BOXCAR	UNC	01326-055+

.....SHOCK.....RESPONSE....TRANSPORTATION.....OTHER.....
SHOCK + VIBRATION DATA OBTAINED FROM TRUCK + RAIL SHIPMENT UNC 01003-006+

.....SHOCK.....RESPONSE....UTILIZATION.....RAILROAD.....
DYNAMIC MEASUREMENT OF TRACK-INDUCED RAILCAR WHEEL ACC UNC 02016-006+

(IMPACT)SHOCK.....INPUT.....GENERAL.....OTHER.....
APPROXIMATE DURATION OF SOME SHORT ACCELERATION LOADS UNC 00734-001+

(IMPACT)SHOCK.....INPUT.....HANDLING.....OTHER.....
MAXIMUM DROPS, PACKAGES IN TRANSIT UNC 01608-004+

(IMPACT)SHOCK.....RESPONSE.....HANDLING.....OTHER.....
MAXIMUM DROPS, PACKAGES IN TRANSIT UNC 01608-004+

.....TEMPERATURE.....INPUT.....GENERAL.....OTHER.....
TEMPERATURE REGIME FOR DESERT REGIONS UNC 00006-002+
TEMPERATURES,1"-99" DESIGN,FOR UNITED STATES AND CANADA UNC 00018-002+
ENVIRONMENT CONDITIONS PREVAILING DURING TRANSIT UNC 00078-001+
TEMPERATURE,EXTREMES/DURATION,FOR STORAGE,HANDLING,TRANSPORT UNC 00080-002+
TEMPERATURE EXTREMES IN TRANSIT UNC 00084-001+
RADIATION,MEAN DAILY TOTAL,FLAT SURFACE,LOCATIONS,US/CANADA UNC 00495-004+

.....TEMPERATURE.....INPUT.....TRANSPORTATION.....AIRCRAFT.....
TEMPERATURES,CARGO COMPARTMENT,C119C AIRCRAFT,ALASKA,WINTER UNC 00061-001+
TEMPERATURES,AIRCRAFT COMPARTMENT UNC 00062-001+
TEMPERATURES,MAXIMUM/MINIMUM,IN AIR AND AIRCRAFT CARGO HOLDS UNC 00064-001+
TEMPERATURES,COMPARTMENT,C141A UNC 00066-001+
FREQUENCY OF OCCURENCE OF AIRCRAFT ICING PARAMETERS UNC 01089-002+
TEMP/TIME DATA AIRCRAFT,TRUCK,TRAIN,ATMX UNC 01288-004+

.....TEMPERATURE.....INPUT.....TRANSPORTATION.....AUTOMOBILE.....
TEMPERATURE/TIME DATA,TRUCK (SEE 1288) UNC 01309-004+
TEMPERATURE,TRUCK CARGO, HIGH AND LOW UNC 01327-027+

.....TEMPERATURE.....INPUT.....TRANSPORTATION.....RAILROAD.....
TEMPERATURE,INTERNAL AIR,RAILROAD BOXCAR IN DESERT UNC 00056-001+
TEMPERATURE TESTS,INTERNAL,RAILROAD FREIGHT CARS WINTER UNC 00057-001+
TEMPERATURE/TIME DATA, RAIL AND ATMX CARS (SEE 1288) UNC 01310-004+
TEMPERATURE, HIGH, STANDING BOXCARS UNC 01401-020+

.....TEMPERATURE.....INPUT.....TRANSPORTATION.....SHIP.....

TEMPERATURES AND RELATIVE HUMIDITY, SHIP HOLD	UNC	00058-001+
TEMPERATURES, MAXIMUM AND MINIMUM, AT SEA	UNC	00059-001+
HUMIDITY, RELATIVE, ABOARD SHIP	UNC	00232-001+
TEMPERATURE IN SHIPS HOLDS	UNC	01262-003+

.....TEMPERATURE.....RESPONSE....TRANSPORTATION.....AIRCRAFT.....

TEMP/TIME DATA AIRCRAFT, TRUCK, TRAIN, ATMX	UNC	01288-004+
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.....TEMPERATURE.....RESPONSE...TRANSPORTATION.....AUTOMOBILE.....

TEMPERATURE/TIME DATA, TRUCK (SEE 1288)	UNC	01309-004+
TEMPERATURE, TRUCK CARGO, HIGH AND LOW	UNC	01327-027+

.....TEMPERATURE.....RESPONSE....TRANSPORTATION.....RAILROAD.....

TEMPERATURE/TIME DATA, RAIL AND ATMX CARS (SEE 1288)	UNC	01310-004+
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.....VIBRATION.....INPUT.....GENERAL.....RAILROAD.....

PARAMETRIC STUDIES RR FRT CAR MATH MODEL HARMONIC ROLL	UNC	01980-005+
RIDE QUALITY OF A CONTAINER FLAT CAR	UNC	01982-006+

.....VIBRATION.....INPUT.....HANDLING.....OTHER.....

SUMMARY, DYNAMIC ENVIRONMENT, FORKLIFT TRUCKS	UNC	01744-031+
SHOCK, VIBRATION, 2000 LB FORKLIFT TRUCK (SEE 1744)	UNC	01745-046+
VIBRATION, INPUT/RESPONSE, 3000 LB FORKLIFT (SEE 1744)	UNC	01748-075+
VIBRATION, INPUT/RESPONSE, 4000 LB FORKLIFT (SEE 1744)	UNC	01751-061+
SHOCK, VIBRATION, 7000 LB FORKLIFT TRUCK (SEE 1744)	UNC	01752-041+

.....VIBRATION.....INPUT.....TRANSPORTATION.....AIRCRAFT.....

DYNAMIC ENVIRONMENT, TURBOJET CARGO AIRCRAFT	UNC	A1533-002+
VIBRATION, MOST PROBABLE EXTREME, PROPELLER DRIVEN AIRCRAFT	UNC	80420-001+
VIBRATION DATA, AIRCRAFT	UNC	00424-001+
VIBRATIONS, MAXIMUM LATERAL AND VERTICAL, HELICOPTER FLOOR	UNC	00433-001+
VIBRATION, KC-135 FLOOR, VERTICAL, LATERAL, LONGITUDINAL	UNC	00846-001+
VIBRATION, FLOOR, PROPELLER, JET, HELICOPTER AIRCRAFT	UNC	00847-001+
VIBRATION, H-37 HELICOPTER FLOOR, VERTICAL, LATERAL FORE/AFT	UNC	00848-001+
VIBRATION, C-123 FLOOR, LONGITUDINAL, VERTICAL, LATERAL AXES	UNC	00851-001+
VIBRATION, C-130 FLOOR, VERTICAL, LATERAL, LONGITUDINAL AXES	UNC	00852-001+
RESPONSE OF TURBOJET/PISTON ENGINE A/C TO RUNWAY ROUGHNESS	UNC	00910-006+
VIBRATION, AIR-RIDE VAN AND C-130, C-133 AIRCRAFT	UNC	01148-009+
VIBRATION NC135 AFT PASSENGER COMPARTMENT	UNC	01318-010+
VIBRATION SUMMARY, HELICOPTER, HH43, UH1, OH6, CH46, CH47	UNC	01321-009+
VIBRATION, CARGO FLOOR, UH-1 HELICOPTER	UNC	01322-007+
VIBRATION, CARGO FLOOR, OH-6 HELICOPTER	UNC	01323-007+
VIBRATION, CARGO FLOOR, CH-46 HELICOPTER	UNC	01324-043+

VIBRATION,CARGO FLOOR,CH-47 HELICOPTER	UNC	01325-031+
VIBRATION, C130A,C130B CARGO FLOOR	UNC	01356-001+
VIBRATION C130,C133 TAKE OFF AND CRUISE	UNC	01357-001+
VIBRATION, CSA CARGO FLOOR - SUMMARY- SEE 1440 TO 1444	UNC	01439-029+
VIBRATION, CSA CARGO FLOOR, STANDARD VIBRAN (SEE 1439)	UNC	01440-085+
VIBRATION, CSA CARGO FLOOR, FORMAT 2 VIBRAN, (SEE 1439)	UNC	01441-030+
VIBRATION, CSA CARGO FLOOR, PSD (SEE 1439)	UNC	01442-088+
VIBRATION, CSA CARGO FLOOR, PSD, (SEE 1439)	UNC	01443-095+
DYNAMIC ENVIRONMENT,C141 JET CARGO AIRCRAFT - FIRST FLIGHT	UNC	01534-024+
DYNAMIC ENVIRONMENT,C141 JET CARGO AIRCRAFT -SECOND FLIGHT	UNC	01535-032+
DYNAMIC ENVIRONMENT,CSA JET CARGO AIRCRAFT	UNC	01536-096+

.....VIBRATION.....INPUT.....TRANSPORTATION.....AUTOMOBILE.....

VIBRATION,PROBABLE MAXIMUM,TRUCK,TRAILER,TRACKED VEHICLE	UNC	B0367-002+
VIBRATION SUMMARY, STANDARD FREIGHT TRAILER R204028	UNC	B1998-069+
VIBRATION-ACCELERATIONS IN HIGHWAY OPERATION OF TRUCKS	UNC	00370-001+

.....VIBRATION.....INPUT.....TRANSPORTATION.....AUTOMOBILE.....

VIBRATION IN ROAD VEHICLES	UNC	00374-001+
VIBRATION,MAXIMUM,ON TRUCKBED,VARIETY OF ROAD OPERATIONS	UNC	00377-001+
VIBRATION,MAXIMUM ACCELERATION IN CARGO TRUCK	UNC	00379-001+
VIBRATION DATA,TYPICAL,VAN TRAILER,NORMAL SUSPENSION	UNC	00397-001+
VIBRATION,FLAT-BED TRACTOR-TRAILER	UNC	00401-001+
VIBRATION,TRUCK FLOOR,EMPTY AND FULLY LOADED	UNC	00849-001+
DYNAMIC ENVIRONMENT ON A FLAT BED TRACTOR/TRAILER (AEC/DOD)	UNC	01006-008+
FINAL ANALYSIS,AEC/DOD FLATBED TRUCK TEST	UNC	01083-041+
VIBRATION ENVIRONMENT,AEC VAN WITH TRANSIT RIG SHIPPING CONT	UNC	01245-061+
VIBRATION/SHOCK, 2 1/2 TON TRUCK	UNC	01264-008+
VIBRATION/SHOCK AIR SUSPENSION VAN	UNC	01277-006+
SHOCK/VIBRATION SUMMARY,UNION CARBIDE TRUCK TEST	UNC	01312-007+
VIBRATION DATA, UNION CARBIDE TRUCK TEST	UNC	01313-045+
VIBRATION,TRUCK,TANDEM AXLE,AIR BAG SUSPENSION	UNC	01361-001+
VIBRATION IN COMMON MOTOR CARRIERS	UNC	01742-007+
TRACTOR/TRAILER TRANSPORT, 3 TYPES SUSPENSION SYSTEM	UNC	01988-005+
VIBRATION, SPECTRAL DENSITY, STANDARD FREIGHT TRAILER	UNC	01997-235+

.....VIBRATION.....INPUT.....TRANSPORTATION.....RAILROAD.....

SHOCK/VIBRATION ENVIRONMENT SUMMARY, RAIL TRANSPORT	UNC	B1320-011+
VIBRATION,RAIL TRANSPORT,SUMMARY OF DATA ON	UNC	00355-001+
VIBRATION DATA,RAIL	UNC	00357-001+
VIBRATION TESTS,RAILROAD,SPEED 40MPH	UNC	00358-001+
VIBRATION TESTS,RAILROAD,SPEED 73MPH	UNC	00359-001+
VIBRATION TESTS,RAILROAD,SPEED 80MPH	UNC	00360-001+
VIBRATIONS IN RAILROAD FREIGHT CARS AT SPEEDS FROM 31-73MPH	UNC	00362-001+
VIBRATIONS MEASURED ON ATMX 500 CAR AT SPEEDS 30-70MPH	UNC	00363-001+
VIBRATION ENVIRONMENT PRODUCED DURING RAIL TRANSPORT	UNC	00366-001+
VIBRATION,RAILROAD,SOFT SPRUNG CAR,VERTICAL AND LATERAL	UNC	00850-001+

VIBRATION, RAILROAD CONTINUOUS AND TRANSIENT	UNC	01031-001+
VIBRATION, RAILROAD ENVELOPES DIRECTIONAL COMPOSITES	UNC	01032-001+
SHOCK/VIBRATION SUMMARY, UNION CARBIDE RAIL TEST	UNC	01315-007+
VIBRATION DATA, UNION CARBIDE RAIL TEST	UNC	01316-065+
VIBRATION, RAIL BOX CAR W/EMPTY, HALF AND FULL LOAD	UNC	01328-084+

.....VIBRATION.....INPUT.....TRANSPORTATION.....SHIP.....

VIBRATION, MOST EXTREME PROBABLE, EXPECTED IN SEA TRANSPORT	UNC	B0404-001+
VIBRATION MEASUREMENTS ON SHIPBOARD DURING TRANSPORT	UNC	00202-001+
VIBRATION DATA, SHIPS	UNC	00405-001+
VIBRATION DATA, SHIPS IN STRAIGHT RUNS AT VARIOUS SPEEDS	UNC	00407-001+
VIBRATION, SHIPBOARD, NORMAL STEAMING AND HARD TURNS	UNC	00408-001+
VIBRATION DATA, SHIPS, HIGH SPEED MANEUVER AND CRASH BACK	UNC	00409-001+
VIBRATIONS, SHIPBOARD, FROM VARIOUS SOURCES	UNC	00415-001+
VIBRATIONS, MERCHANT SHIP SS WOLVERINE STATE	UNC	00418-025+

.....VIBRATION.....INPUT.....TRANSPORTATION.....OTHER.....

SUMMARY, DYNAMIC ENVIRONMENT OF TRANSPORTATION - 1973	UNC	A1354-018+
VIBRATION SUMMARIES OF EDB1354 IN PSD FORMATS	UNC	B1354-006+
VIBRATION-MAXIMUM ACCELERATIONS FOR VARIOUS VEHICLES	UNC	00368-001+
SHOCK + VIBRATION DATA OBTAINED FROM TRUCK + RAIL SHIPMENT	UNC	01003-006+
TRANSPORTATION VIBRATION ENVIRONMENTS	UNC	01176-002+

.....VIBRATION.....RESPONSE.....GENERAL.....AUTOMOBILE.....

STUDY OF PASSENGER RESPONSE TO IDEAL AND REAL VEH VIB	UNC	01941-001+
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.....VIBRATION.....RESPONSE.....HANDLING.....OTHER.....

SUMMARY, DYNAMIC ENVIRONMENT, FORKLIFT TRUCKS	UNC	01744-031+
SHOCK, VIBRATION, 2000 LB FORKLIFT TRUCK (SEE 1744)	UNC	01745-046+
VIBRATION, INPUT/RESPONSE, 3000 LB FORKLIFT (SEE 1744)	UNC	01748-075+
VIBRATION, INPUT/RESPONSE, 4000 LB FORKLIFT (SEE 1744)	UNC	01751-061+
SHOCK, VIBRATION, 7000 LB FORKLIFT TRUCK (SEE 1744)	UNC	01752-041+

.....VIBRATION.....RESPONSE....TRANSPORTATION.....AIRCRAFT.....

VIBRATION NC135 AFT PASSENGER COMPARTMENT	UNC	01318-010+
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.....VIBRATION.....RESPONSE....TRANSPORTATION.....AUTOMOBILE.....

VIBRATION ENVIRONMENT, AEC VAN WITH TRANSIT RIG SHIPPING CONT	UNC	01245-061+
SHOCK/VIBRATION SUMMARY, UNION CARBIDE TRUCK TEST	UNC	01312-007+
VIBRATION DATA, UNION CARBIDE TRUCK TEST	UNC	01313-045+

.....VIBRATION.....RESPONSE....TRANSPORTATION.....RAILROAD.....

SHOCK/VIBRATION ENVIRONMENT SUMMARY, RAIL TRANSPORT	UNC	B1320-011+
SHOCK/VIBRATION SUMMARY, UNION CARBIDE RAIL TEST	UNC	01315-007+
VIBRATION DATA, UNION CARBIDE RAIL TEST	UNC	01316-065+
VIBRATION, RAIL BOX CAR W/EMPTY, HALF AND FULL LOAD	UNC	01328-084+

.....VIBRATION.....RESPONSE....TRANSPORTATION.....OTHER.....

SHOCK + VIBRATION DATA OBTAINED FROM TRUCK + RAIL SHIPMENT	UNC	01003-006+
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.....VIBRATION.....RESPONSE.....UTILIZATION.....RAILROAD.....

DYNAMIC MEASUREMENT OF TRACK-INDUCED RAILCAR WHEEL ACC	UNC	02016-006+
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.....WIND.....INPUT.....GENERAL.....OTHER.....

ENVIRONMENT CONDITIONS PREVAILING DURING TRANSIT	UNC	00078-001+
WIND VELOCITIES, WORLDWIDE, AND DISTRIBUTION IN TEMPERATE ZONE	UNC	00258-001+
WIND SPEED DISTRIBUTION IN THE UNITED STATES	UNC	01595-005+
GLAZE ICE, WIND LOADS AT EARTHS SURFACE	UNC	01722-001+

.....WIND.....INPUT.....TRANSPORTATION.....AIRCRAFT.....

FATIGUE DAMAGE PARAMETERS, TRANSPORT AIRCRAFT	UNC	01085-001+
GUST LOAD FREQUENCY, AIRCRAFT FLIGHTS, 40-45 KILOFEET, IN STORM	UNC	01087-002+
AIRCRAFT RECORDINGS DURING A TURBULENCE INCIDENT	UNC	01090-001+

.....WIND.....RESPONSE....TRANSPORTATION.....AIRCRAFT.....

GUST LOAD FREQUENCY, AIRCRAFT FLIGHTS, 40-45 KILOFEET, IN STORM	UNC	01087-002+
AIRCRAFT RECORDINGS DURING A TURBULENCE INCIDENT	UNC	01090-001+

(STORM)WIND.....INPUT.....GENERAL.....OTHER.....

WIND AND WAVE HEIGHTS - TROPICAL STORMS	UNC	01636-002+
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Abnormal Environments

....ACCELERATION/TIME.....INPUT.....GENERAL.....AIRCRAFT.....

ACCIDENT RATES, CIVIL AIRCRAFT 1964 - 1974	UNC	01634-006+
CIVIL AIRCRAFT ACCIDENT TYPES, 1970 - 1974	UNC	01673-005+
AIRCRAFT ACCIDENT REPORTS - NTSB - 1972	UNC	01724-002+
AIRCRAFT ACCIDENTS, TYPE, RATE, NTSB 1970	UNC	01756-002+
AIRCRAFT ACCIDENTS, TYPE, RATE, NTSB 1973	UNC	01757-010+
NTSB 1974 REPORT TO CONGRESS, AIRCRAFT	UNC	01904-004+
SUMMARY US CIVIL AVIATION ACCIDENT STATISTICS 1965-75	UNC	01923-007+
AIRCRAFT ACCIDENTS INVOLVING FIRES 1963-1974 ANALYSIS	UNC	01940-002+
ACCIDENT RATES, CIVIL AIRCRAFT 1974	UNC	01942-004+
COMPARISON 1974 CIVIL A/C ACCIDENT RATES TO 1969-73	UNC	01943-007+
ACCIDENT RATES, CIVIL AIRCRAFT, 1963-1973	UNC	01959-007+
ACCIDENT RATES CIVIL AIRCRAFT 1966 - 1976	UNC	02005-008+

....ACCELERATION/TIME.....INPUT.....GENERAL.....AUTOMOBILE.....

NTSB 1974 REPORT TO CONGRESS, AUTOMOBILE	UNC	01905-001+
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....ACCELERATION/TIME.....INPUT.....GENERAL.....RAILROAD.....

RAIL ACCIDENT SPEED STATISTICS	UNC	01020-002+
RAIL ACCIDENT STATISTICS, 1969	UNC	01666-002+
RAIL ACCIDENT STATISTICS, 1971	UNC	01667-002+
NTSB 1974 REPORT TO CONGRESS, RAIL	UNC	01906-001+
TRAIN ACCIDENT RATES, 1965-1974	UNC	01920-004+

....ACCELERATION/TIME.....INPUT.....GENERAL.....SHIP.....

SUMMARY FRT SHIPS AND FRT BARGE ACCIDENTS 1965 - 1974	UNC	01985-005+
SUMMARY US TANKSHIPS AND TNK BARGE ACCIDENTS 1963-1975	UNC	01992-005+

....ACCELERATION/TIME.....INPUT.....TRANSPORTATION.....AUTOMOBILE.....

TRAN ACCIDENT RISKS IN NUCLEAR POWER IND 1975-2020	UNC	01989-002+
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....ACCELERATION/TIME.....INPUT.....TRANSPORTATION.....RAILROAD.....

TRAN ACCIDENT RISKS IN NUCLEAR POWER IND SEE EDB 1989	UNC	01990-001+
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....ACCELERATION/TIME.....INPUT.....TRANSPORTATION.....SHIP.....

TRAN ACCIDENT RISKS IN NUCLEAR POWER IND SEE EDB 1989	UNC	01991-001+
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(EARTHQUAKE)ACCELERATION/TIME.....INPUT.....GENERAL.....OTHER.....

EARTHQUAKES IN THE UNITED STATES	UNC	00948-004+
EARTHQUAKE, STRONG MOTION - ACCELOGRAMS G VS TIME	UNC	01526-004+

(EARTHQUAKE)	....ACCELERATION/TIME.....INPUT.....GENERAL.....	....OTHER.....
	EARTHQUAKE, STRONG MOTION - ACCELOGRAMS G VS TIME	UNC 01527-004+
	EARTHQUAKE - ROCK MOTION ACCELOGRAMS G VS TIME, DISTANCE	UNC 01528-001+
	STRONG MOTION EARTHQUAKE ACCELOGRAMS - PART F	UNC 01570-004+
	STRONG MOTION EARTHQUAKE ACCELOGRAMS - PART G	UNC 01571-004+
	STRONG MOTION EARTHQUAKE ACCELOGRAMS - PART H	UNC 01572-004+
	STRONG MOTION EARTHQUAKE ACCELOGRAMS- VOL I,PT I, DATA	UNC 01600-004+
	STRONG MOTION EARTHQUAKE ACCELOGRAMS- VOL I,PT J, DATA	UNC 01601-004+
	STRONG MOTION EARTHQUAKE ACCELOGRAMS- VOL I,PT K, DATA	UNC 01602-004+
	STRONG MOTION EARTHQUAKE ACCELOGRAMS-VOL III,RES. SPECTRA	UNC 01603-003+
	STRONG MOTION EARTHQUAKE ACCELOGRAMS- VOL IV,FOURIER SPECTRA	UNC 01604-002+
	EARTHQUAKE, ANCHORAGE, 1964(ENGINEERING INFORMATION	UNC 01661-002+
	EARTHQUAKE ACCELOGRAMS-DIGITIZED AND PLOTTED DATA	UNC 01852-002+
	EARTHQUAKE ACCELOGRAMS-RESPONSE SPECTRA	UNC 01853-004+
	EARTHQUAKE ACCELOGRAMS-RESPONSE SPECTRA	UNC 01854-003+
	EARTHQUAKE ACCELOGRAMS-FOURIER SPECTRA	UNC 01855-003+
(IMPACT)	....ACCELERATION/TIME.....INPUT.....GENERAL.....	AUTOMOBILE.....
	TRUCK ACCIDENT SPEEDS A - SUMMARY	UNC 01687-002+
	STATISTICAL STUDY OF TRUCK ACCIDENT SPEEDS	UNC 01698-012+
(IMPACT)	....ACCELERATION/TIME.....INPUT.....GENERAL.....	....OTHER.....
	APPROXIMATE DURATION OF SOME SHORT ACCELERATION LOADS	UNC 00734-001+
(IMPACT)	....ACCELERATION/TIME.....INPUT.....TRANSPORTATION.....	AIRCRAFT.....
	ANALYSIS OF DIRECTION OF LOADS IN AIRCRAFT ACCIDENTS	UNC 00751-001+
	ACCELERATION OF FLOOR-AIRCRAFT CRASHES	UNC 00752-001+
	ACCELERATION,AIRCRAFT CRASH-VARIOUS ANGLES OF IMPACT	UNC 00753-008+
	CIVIL AVIATION ACCIDENT DATA - 1962 TO 1972	UNC 01664-009+
	AIRCRAFT ACCIDENT - BOEING 707 -8/28/73	UNC 01801-001+
	AIRCRAFT ACCIDENT - BOEING 747 - 4/12/72	UNC 01818-001+
	A RISK AND COMPARATIVE ANALYSIS OF NAVY AIRCRAFT DATA	UNC 01857-001+
	ARMY ROTARY WING AIRCRAFT ACCIDENTS-COST STUDY 1970-71	UNC 01895-016+
	CRASH RESISTANT FLAMMABLE FLUIDS SYSTEM UH-1A COPTER	UNC 02001-003+
	FULL SCALE CRASH TEST OF A CH-47C HELICOPTER	UNC 02024-040+
(IMPACT)	....ACCELERATION/TIME.....INPUT.....TRANSPORTATION.....	AUTOMOBILE.....
	TRUCK ACCIDENT ENVIRONMENT ANALYSIS TAC - STUDY	UNC C1944-002+
	ACCELERATIONS,AUTOMOBILE CRASH (HEAD-ON)	UNC 00737-001+
	DECELERATION PATTERNS FOR AUTOMOBILE HEAD-ON COLLISIONS	UNC 00738-001+
	TRUCK ACCIDENTS,NHTSA,FINAL REPORT	UNC 01875-019+
	TRUCK ACCIDENTS,NHTSA,VOL6,NO.4	UNC 01876-003+
	TRUCK ACCIDENTS,NHTSA,VOL6,NO.5	UNC 01877-004+

(IMPACT)

....ACCELERATION/TIME.....INPUT.....TRANSPORTATION.....AUTOMOBILE.....

TRUCK ACCIDENTS, NHTSA, VOL 6, NO. 6	UNC	01878-008+
TRUCK ACCIDENTS, NHTSA, VOL 6, NO. 7	UNC	01879-006+
TRUCK ACCIDENTS, NHTSA, VOL 6, NO. 8	UNC	01880-011+
TRUCK ACCIDENTS, NHTSA, VOL 6, NO. 9	UNC	01881-014+
CAR ACCIDENT, NHTSA, VOL. 6, NO. 11	UNC	01898-005+
TRUCK ACCIDENT, NHTSA, VOL. 6, NO. 10	UNC	01899-005+
TRUCK ACCIDENT, NHTSA, VOL. 6, NO. 12	UNC	01900-004+
TRUCK/PICKUP TRUCK W/CAMPER AND TRAILER COLLISION	UNC	01901-015+
AUTO COLLISION W/AND COLLAPSE OF BRIDGE, SILOAM, NC	UNC	01952-014+
TRUCK ACCIDENT, EXPLOSION/FIRE, EAGLE PASS, TEXAS	UNC	01953-011+
SCHOOLBUS/AUTO COLLISION/ROLLOVER, ASHLAND, OREGON	UNC	01954-017+
COLLISION OF TRUCK AND BUS, NEAR HAMILTON, GA JUN 1975	UNC	01955-009+
COLLISION OF WINNEBAGO MOTOR HOME W/BRIDGE 1 JUL 1975	UNC	01956-015+
COLLISION OF TRUCK AND CAR, LOVINGTON, NM 3 JAN 1976	UNC	01957-006+
CAR COLLISION, FRONT-TO-FRONT IMPACT TEST AT 60 MPH	UNC	01958-002+
TRUCK TRACTOR-TRAILER/GROUND/ROLLOVER VOL 7, NO 1	UNC	01962-004+
TRUCK TRACTOR-SPORTS VAN IMPACT VOL 7, NO 1	UNC	01963-005+
TRUCK CAR ACCIDENT, BALTIMORE, MD, ON INTERSTATE	UNC	01964-006+
TRUCK CAR ACCIDENT, REAR END UNDER-RIDE IMPACT, VOL 7	UNC	01965-006+
GASOLINE TRUCK ACCIDENT, SEATTLE, WA 4 DEC 1975	UNC	01966-001+
TRACTOR TRAILER/CAR/SCHOOL BUS, REAR END, ROLLOVER	UNC	01967-005+
CAR BUS ACCIDENT, OVERLAND PARK, KANSAS 7 OCT 1975	UNC	01968-005+
STATION WAGON/TRAIN ACCIDENT, BALTIMORE, MD DEC 1975	UNC	01969-006+
TRACTOR TRAILER, REAR END AND ROLLOVER NY 1 JUL 1975	UNC	01970-005+
TRUCK ACCIDENT, TIRE BLEW OUT, IMPACT, NY 21 JUN 1975	UNC	01971-005+
STATION WAGON/SCHOOL BUS, HEAD ON, HAMBURG, NY SEP 1975	UNC	01972-005+
TRUCK/SCHOOL BUS/TRAIN ACCIDENT, ARKANSAS 11 SEP 1975	UNC	01973-005+
TRACTOR TRAILER, FRONT TO SIDE IMPACT FEB 1975	UNC	01974-006+
TRUCK CAR ACCIDENT INTERSECCION, BALTIMORE, MD FEB 1975	UNC	01975-006+
CAR/POLE/TRAIN SIDESWIPE IMPACT, LOS ANGLES 25 SEP 1975	UNC	01976-004+
TRUCK CAR ACCIDENT, REAR END, SAN DIEGO FREEWAY JAN 1976	UNC	01977-005+
UNDERIDE OVERRIDE INTERVEHICULAR COLLISIONS	UNC	02002-003+
TRUCK ACCIDENT, TRI-STATE RIG, GILA BEND AZ	UNC	02006-006+
TRUCK ACCIDENT, COLLISION LEFT ROADWAY WASHINGTON DC	UNC	02007-007+
TRUCK/SCHOOL BUS COLLISION LAKE PLACID FL	UNC	02008-006+
TRUCK/VAN/AUTO ACCIDENT LEXINGTON VA 20 AUG 1976	UNC	02013-007+

(IMPACT)

....ACCELERATION/TIME.....INPUT.....TRANSPORTATION.....RAILROAD.....

REAR END COLLISION AND DERAILMENT MEEKER, LA MAY 1975	UNC	01924-012+
RAIL ACCIDENT, HEAD-IN, EL MONTE, CA 2 APR 1973	UNC	01925-004+
RAIL ACCIDENT, HEAD-ON, LUFKIN, TEXAS 18 NOV 1973	UNC	01926-003+
RAIL ACCIDENT, HEAD-ON, COBDEN, ILLINOIS 2 DEC 1973	UNC	01927-003+
RAIL ACCIDENT, HEAD-ON, PLAINVIEW, TEXAS 15 DEC 1973	UNC	01928-003+
RAIL ACCIDENT, HEAD-ON, ST LOUIS, MISSOURI 22 JUN 1974	UNC	01929-004+
RAIL ACCIDENT, HEAD-ON, MEMPHIS, TEN 24 JAN 1975	UNC	01930-003+

(IMPACT)ACCELERATION/TIME.....INPUT.....TRANSPORTATION.....RAILROAD.....

RAIL ACCIDENT, SIDE-ON, EARLS, TEXAS	29 NOV 1974	UNC	01931-003+
RAIL ACCIDENT, OPEN SWITCH, WINDHAM, OHIO	22 NOV 1973	UNC	01932-002+
RAIL ACCIDENT, RAKING, LAKE JUNCTION, NJ	17 JUN 1974	UNC	01933-004+
RAIL ACCIDENT, REAR END, HURRICANE, ALASKA	5 JUL 1975	UNC	01945-012+
RAIL ACCIDENT, REAR END, LEETONIA, OHIO	6 JUN 1975	UNC	01946-014+
RAIL ACCIDENT, REAR END, DUPO, ILLINOIS	3 JAN 1975	UNC	01947-004+
RAIL ACCIDENT, GRADE CROSSING, DEL MAR, CA	27 FEB 1974	UNC	01948-003+
RAIL ACCIDENT, BROKEN RAIL, THOMPSONTOWN, PA	DEC 1974	UNC	01949-002+
RAIL ACCIDENT, GRADE CROSSING, TRACY, CA	9 MAR 1975	UNC	01950-015+
RAIL ACCIDENT, GRADE CROSSING, ELWOOD, IL	19 NOV 1975	UNC	01951-012+
RAIL ACCIDENT, UNPROTECTED GRADE CROSSING	7 FEB 1976	UNC	02010-006+
RAIL ACCIDENT, DERAILMENT JARRATT VA	5 MAY 1976	UNC	02011-013+
RAIL ACCIDENT, HEAD-ON 2 TRAINS PETTISVILLE OH		UNC	02012-008+
AUTOMATED WHEEL-ON-THE-GROUND DERAILMENT DETECTION SYS		UNC	02017-006+
BIRMINGHAM DERAILEMENT, TRACK GAGE WIDENS	16 JAN 1977	UNC	02023-002+

(IMPACT)ACCELERATION/TIME.....INPUT.....TRANSPORTATION.....SHIP.....

NATURE OF SHIP COLLISIONS WITHIN PORTS		UNC	02026-001+
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(IMPACT)ACCELERATION/TIME.....RESPONSE....TRANSPORTATION.....AIRCRAFT.....

FULL SCALE CRASH TEST OF A CH-47C HELICOPTER		UNC	02024-040+
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(IMPACT)ACCELERATION/TIME.....RESPONSE....TRANSPORTATION.....AUTOMOBILE.....

TRUCK ACCIDENTS,NHTSA,FINAL REPORT		UNC	01875-019+
TRUCK ACCIDENTS,NHTSA,VOL6,NO.4		UNC	01876-003+
TRUCK ACCIDENTS,NHTSA,VOL6,NO.5		UNC	01877-004+
TRUCK ACCIDENTS,NHTSA,VOL6,NO.6		UNC	01878-008+
TRUCK ACCIDENTS,NHTSA,VOL6,NO.7		UNC	01879-006+
TRUCK ACCIDENTS,NHTSA,VOL6,NO.8		UNC	01880-011+
TRUCK ACCIDENTS,NHTSA,VOL6,NO.9		UNC	01881-014+
CAR ACCIDENT, NHTSA,VOL.6, NO.11		UNC	01898-005+
TRUCK ACCIDENT, NHTSA,VOL.6, NO.10		UNC	01899-005+
TRUCK ACCIDENT, NHTSA,VOL.6, NO.12		UNC	01900-004+
TRUCK/PICKUP TRUCK W/CAMPER AND TRAILER COLLISION		UNC	01901-015+
AUTO COLLISION W/AND COLLAPSE OF BRIDGE, SILOAM, NC		UNC	01952-014+
TRUCK ACCIDENT, EXPLOSION/FIRE, EAGLE PASS, TEXAS		UNC	01953-011+
SCHOOLBUS/AUTO COLLISION/ROLLOVER, ASHLAND, OREGON		UNC	01954-017+
COLLISION OF TRUCK AND BUS, NEAR HAMILTON, GA JUN 1975		UNC	01955-009+
COLLISION OF WINNEBAGO MOTOR HOME W/BRIDGE 1 JUL 1975		UNC	01956-015+
COLLISION OF TRUCK AND CAR, LOVINGTON, NM 3 JAN 1976		UNC	01957-006+
CAR COLLISION, FRONT-TO-FRONT IMPACT TEST AT 60 MPH		UNC	01958-002+
TRUCK TRACTOR-TRAILER/GROUND/ROLLOVER VOL 7, NO 1		UNC	01962-004+
TRUCK TRACTOR-SPORTS VAN IMPACT VOL 7, NO 1		UNC	01963-005+

(IMPACT)

....ACCELERATION/TIME.....RESPONSE.....TRANSPORTATION.....AUTOMOBILE.....

TRUCK CAR ACCIDENT, BALTIMORE, MD, ON INTERSTATE	UNC	01964-006+	
TRUCK CAR ACCIDENT, REAR END UNDER-RIDE IMPACT, VOL 7	UNC	01965-006+	
GASOLINE TRUCK ACCIDENT, SEATTLE, WA	4 DEC 1975	UNC	01966-001+
TRACTOR TRAILER/CAR/SCHOOL BUS, REAR END, ROLLOVER		UNC	01967-005+
CAR BUS ACCIDENT, OVERLAND PARK, KANSAS	7 OCT 1975	UNC	01968-005+
STATION WAGON/TRAIN ACCIDENT, BALTIMORE, MD	DEC 1975	UNC	01969-006+
TRACTOR TRAILER, REAR END AND ROLLOVER NY	1 JUL 1975	UNC	01970-005+
TRUCK ACCIDENT, TIRE BLEW OUT, IMPACT, NY	21 JUN 1975	UNC	01971-005+
STATION WAGON/SCHOOL BUS, HEAD ON, HAMBURG, NY	SEP 1975	UNC	01972-005+
TRUCK/SCHOOL BUS/TRAIN ACCIDENT, ARKANSAS	11 SEP 1975	UNC	01973-005+
TRACTOR TRAILER, FRONT TO SIDE IMPACT	FEB 1975	UNC	01974-006+
TRUCK CAR ACCIDENT INTERSECCION, BALTIMORE, MD	FEB 1975	UNC	01975-006+
CAR/POLE/TRAIN SIDESWIPE IMPACT, LOS ANGLES	25 SEP 1975	UNC	01976-004+
TRUCK CAR ACCIDENT, REAR END, SAN DIEGO FREEWAY	JAN 1976	UNC	01977-005+
TRUCK ACCIDENT, TRI-STATE RIG, GILA BEND AZ		UNC	02006-006+
TRUCK ACCIDENT, COLLISION LEFT ROADWAY WASHINGTON DC		UNC	02007-007+
TRUCK/SCHOOL BUS COLLISION LAKE PLACID FL		UNC	02008-006+
TRUCK/VAN/AUTO ACCIDENT LEXINGTON VA	20 AUG 1976	UNC	02013-007+

(IMPACT)

....ACCELERATION/TIME.....RESPONSE.....TRANSPORTATION.....RAILROAD.....

RAIL ACCIDENT, HEAD-IN, EL MONTE, CA	2 APR 1973	UNC	01925-004+
RAIL ACCIDENT, HEAD-ON, LUFKIN, TEXAS	18 NOV 1973	UNC	01926-003+
RAIL ACCIDENT, HEAD-ON, COBDEN, ILLINOIS	2 DEC 1973	UNC	01927-003+
RAIL ACCIDENT, HEAD-ON, PLAINVIEW, TEXAS	15 DEC 1973	UNC	01928-003+
RAIL ACCIDENT, HEAD-ON, ST LOUIS, MISSOURI	22 JUN 1974	UNC	01929-004+
RAIL ACCIDENT, HEAD-ON, MEMPHIS, TEN	24 JAN 1975	UNC	01930-003+
RAIL ACCIDENT, SIDE-ON, EARLS, TEXAS	29 NOV 1974	UNC	01931-003+
RAIL ACCIDENT, OPEN SWITCH, WINDHAM, OHIO	22 NOV 1973	UNC	01932-002+
RAIL ACCIDENT, RAKING, LAKE JUNCTION, NJ	17 JUN 1974	UNC	01933-004+
RAIL ACCIDENT, REAR END, HURRICANE, ALASKA	5 JUL 1975	UNC	01945-012+
RAIL ACCIDENT, REAR END, LEETONIA, OHIO	6 JUN 1975	UNC	01946-014+
RAIL ACCIDENT, REAR END, DUPO, ILLINOIS	3 JAN 1975	UNC	01947-004+
RAIL ACCIDENT, GRADE CROSSING, DEL MAR, CA	27 FEB 1974	UNC	01948-003+
RAIL ACCIDENT, BROKEN RAIL, THOMPSONTOWN, PA	DEC 1974	UNC	01949-002+
RAIL ACCIDENT, GRADE CROSSING, TRACY, CA	9 MAR 1975	UNC	01950-015+
RAIL ACCIDENT, GRADE CROSSING, ELWOOD, IL	19 NOV 1975	UNC	01951-012+
RAIL ACCIDENT, UNPROTECTED GRADE CROSSING	7 FEB 1976	UNC	02010-006+
RAIL ACCIDENT, DERAILMENT JARRATT VA	5 MAY 1976	UNC	02011-013+
RAIL ACCIDENT, HEAD-ON 2 TRAINS PETTISVILLE OH		UNC	02012-008+
AUTOMATED WHEEL-ON-THE-GROUND DERAILMENT DETECTION SYS		UNC	02017-006+
BIRMINGHAM DERAILEMENT, TRACK GAGE WIDENS	16 JAN 1977	UNC	02023-002+

(IMPACT)ACCELERATION/TIME.....RESPONSE....TRANSPORTATION.....SHIP.....
NATURE OF SHIP COLLISIONS WITHIN PORTS UNC 02026-001+

(PROJECTILE/IMPALEMENT)FRAGMENTATION.....INPUT.....TRANSPORTATION.....AIRCRAFT.....
AIRCRAFT ACCIDENT, INFLIGHT SEPARATION PROPELLER BLADE UNC 02004-001+

(PUNCTURE)FRAGMENTATION.....INPUT.....GENERAL.....OTHER.....
FRAGMENTS, MASS, VELOCITY, STANDARD ARTILLERY SHELLS UNC 01814-002+

(PUNCTURE)FRAGMENTATION.....INPUT.....TRANSPORTATION.....AIRCRAFT.....
ROTOR FRAGMENT CONTAINMENT-JET ENGINE FAILURE - 1972 UNC 01781-010+

(PUNCTURE)FRAGMENTATION.....INPUT.....TRANSPORTATION.....AUTOMOBILE.....
SEVERITIES TRAN ACCIDENT VOL 3 MOTOR CARRIER SEE A1630 UNC A1663-001+
TRUCK ACCIDENT-FLORIDA-8/8/71 UNC 01695-003+
TRUCK ACCIDENT REPORTS, NHTSA, NO. 7 UNC 01753-005+
TRUCK ACCIDENT REPORTS, NHTSA, NO. 8 UNC 01754-004+
TRUCK ACCIDENT REPORTS, NHTSA, NO. 9 UNC 01755-005+

(PUNCTURE)FRAGMENTATION.....INPUT.....TRANSPORTATION.....RAILROAD.....
SEVERITIES TRAN ACCIDENT VOL 4 TRAIN SEE A1630 UNC A1986-001+
RAIL ACCIDENT, HOUSTON, TEXAS 21 SEPT, 1974 UNC 01893-014+

(PUNCTURE)FRAGMENTATION.....INPUT.....TRANSPORTATION.....SHIP.....
IMPACT, PENETRATION, SHIP COLLISION AND GROUNDING UNC 01550-001+

(PUNCTURE)FRAGMENTATION.....INPUT.....TRANSPORTATION.....OTHER.....
SEVERITIES OF TRANSPORTATION ACCIDENTS VOL 1 SUMMARY UNC A1630-006+

(PUNCTURE)FRAGMENTATION.....RESPONSE....TRANSPORTATION.....AUTOMOBILE.....
CARGO RESPONSE TRUCK AND RAIL ACCIDENTS UNC 01688-002+
TRUCK ACCIDENT-FLORIDA-8/8/71 UNC 01695-003+

(PUNCTURE)FRAGMENTATION.....RESPONSE....TRANSPORTATION.....RAILROAD.....
CARGO RESPONSE TRUCK AND RAIL ACCIDENTS SEE EDB1688 UNC 01699-002+
RAIL ACCIDENT, HOUSTON, TEXAS, 19OCT1971 UNC 01846-006+
RAIL ACCIDENT, CRESCENT CITY, 19AUG1970 UNC 01847-009+
RAIL ACCIDENT, HOUSTON, TEXAS 21 SEPT, 1974 UNC 01893-014+

(EXPLOSION)FRAGMENTATION.....INPUT.....TRANSPORTATION.....AUTOMOBILE.....

TRUCK ACCIDENT-NEW JERSEY 9/21/72	UNC	01690-003+
TRUCK ACCIDENT-GEORGIA-6/4/71	UNC	01694-003+
TRUCK ACCIDENT-VIRGINIA-3/9/72	UNC	01696-003+

.....PRESSURE.....INPUT.....GENERAL.....OTHER.....

TYPHOON REPORT - PACIFIC OCEAN - 1959	UNC	01802-003+
TYPHOON REPORT - PACIFIC OCEAN - 1960	UNC	01803-003+
TYPHOON REPORT - PACIFIC OCEAN - 1961	UNC	01804-003+
TYPHOON REPORT - PACIFIC OCEAN - 1962	UNC	01805-004+
TYPHOON REPORT - PACIFIC OCEAN - 1963	UNC	01806-003+
TYPHOON REPORT - PACIFIC OCEAN - 1965	UNC	01807-003+
TYPHOON REPORT - PACIFIC OCEAN - 1966	UNC	01808-003+
TYPHOON REPORT - PACIFIC OCEAN - 1967	UNC	01809-003+
TYPHOON REPORT - PACIFIC OCEAN - 1968	UNC	01810-004+
TYPHOON REPORT - PACIFIC OCEAN - 1969	UNC	01811-002+
TYPHOON REPORT - PACIFIC OCEAN - 1970	UNC	01812-003+
TYPHOON REPORT - PACIFIC OCEAN - 1974	UNC	01813-003+
TROPICAL CYCLONES	UNC	01856-002+

(CRUSH)PRESSURE.....INPUT.....TRANSPORTATION.....AUTOMOBILE.....

GASOLINE TRUCK ACCIDENT, SEATTLE, WA	4 DEC 1975	UNC	01966-001+
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(CRUSH)PRESSURE.....RESPONSE....TRANSPORTATION.....AUTOMOBILE.....

CARGO RESPONSE TRUCK AND RAIL ACCIDENTS	UNC	01688-002+	
GASOLINE TRUCK ACCIDENT, SEATTLE, WA	4 DEC 1975	UNC	01966-001+

(CRUSH)PRESSURE.....RESPONSE....TRANSPORTATION.....RAILROAD.....

CARGO RESPONSE TRUCK AND RAIL ACCIDENTS SEE EDB1688	UNC	01699-002+
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(IMMERSION)PRESSURE.....INPUT.....TRANSPORTATION.....AIRCRAFT.....

SEVERITIES TRAN ACCIDENT VOL 2 CARGO AIRCRAFT SEE 1630	UNC	A1662-001+
A/C ACCIDENT DEHAVILLAND DHC 16 FEB 1970	UNC	01679-003+
A/C ACCIDENT DC9 MAY 1970	UNC	01682-003+
A/C ACCIDENT SKYVAN SERIES 3 JULY 1970	UNC	01683-003+

(IMMERSION)PRESSURE.....INPUT.....TRANSPORTATION.....AUTOMOBILE.....

SEVERITIES TRAN ACCIDENT VOL 3 MOTOR CARRIER SEE A1630	UNC	A1663-001+
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(IMMERSION)PRESSURE.....INPUT.....TRANSPORTATION.....RAILROAD.....

SEVERITIES TRAN ACCIDENT VOL 4 TRAIN SEE A1630	UNC	A1986-001+
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(IMMERSION)PRESSURE.....INPUT.....TRANSPORTATION.....SHIP.....

SINKING SS SILVER DOVE, CRACKED WALL IN CARGO HOLD	UNC	02009-003+
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(IMMERSION)PRESSURE.....INPUT.....TRANSPORTATION.....OTHER.....

SEVERITIES OF TRANSPORTATION ACCIDENTS VOL 1 SUMMARY UNC A1630-006+

(IMMERSION)PRESSURE.....RESPONSE....TRANSPORTATION.....SHIP.....

SINKING SS SILVER DOVE, CRACKED WALL IN CARGO HOLD UNC 02009-003+

(EXPLOSION)PRESSURE.....INPUT.....TRANSPORTATION.....AUTOMOBILE.....

HYDROGEN TRANSPORT AND HANDLING EXPLOSION
TRUCK ACCIDENT, EXPLOSION/FIRE, EAGLE PASS, TEXAS UNC 01758-001+
COLLISION OF WINNEBAGO MOTOR HOME W/BRIDGE 1 JUL 1975 UNC 01953-011+
UNC 01956-015+

(EXPLOSION)PRESSURE.....INPUT.....TRANSPORTATION.....RAILROAD.....

RAIL ACCIDENT, EAST ST LOUIS, ILLINOIS - 1/22/72 UNC 01706-003+
RAIL ACCIDENT, CRETE, NEBRASKA - 2/18/69 UNC 01707-003+
RAIL ACCIDENT, HOUSTON, TEXAS - 10/19/71 UNC 01708-001+
RAIL ACCIDENT,DECATUR,ILL 19 JULY,1974 UNC 01889-012+
RAIL ACCIDENT,BENSON,AR 24 MAY,1973 UNC 01891-016+
RAIL ACCIDENT, HOUSTON,TEXAS 21 SEPT, 1974 UNC 01893-014+
RAIL ACCIDENT, EXPLOSION OF PRM, WENATCHEE,WI AUG 1974 UNC 01938-035+

(EXPLOSION)PRESSURE.....RESPONSE....TRANSPORTATION.....AUTOMOBILE.....

TRUCK ACCIDENT, EXPLOSION/FIRE, EAGLE PASS, TEXAS UNC 01953-011+
COLLISION OF WINNEBAGO MOTOR HOME W/BRIDGE 1 JUL 1975 UNC 01956-015+

(EXPLOSION)PRESSURE.....RESPONSE....TRANSPORTATION.....RAILROAD.....

RAIL ACCIDENT,DECATUR,ILL 19 JULY,1974 UNC 01889-012+
RAIL ACCIDENT,BENSON,AR 24 MAY,1973 UNC 01891-016+
RAIL ACCIDENT, HOUSTON,TEXAS 21 SEPT, 1974 UNC 01893-014+

.....RADIATION.....INPUT.....TRANSPORTATION.....AUTOMOBILE.....

TRAN ACCIDENT RISKS IN NUCLEAR POWER IND 1975-2020 UNC 01989-002+

.....RADIATION.....INPUT.....TRANSPORTATION.....RAILROAD.....

TRAN ACCIDENT RISKS IN NUCLEAR POWER IND SEE EDB 1989 UNC 01990-001+

.....RADIATION.....INPUT.....TRANSPORTATION.....SHIP.....

TRAN ACCIDENT RISKS IN NUCLEAR POWER IND SEE EDB 1989 UNC 01991-001+

(LIGHTNING)RADIATION.....INPUT.....GENERAL.....OTHER.....

VOLTAGE AND CURRENT CHARACTERISTICS OF LIGHTNING STRIKE
PROPERTIES OF LIGHTNING STROKES UNC 00464-002+
UNC 00999-001+

(LIGHTNING)RADIATION.....INPUT.....TRANSPORTATION.....AIRCRAFT.....

LIGHTNING THREAT TO AIRCRAFT
LIGHTNING HAZARD TO AIRCRAFT UNC 01000-002+
UNC 01415-006+

(CRUSH)SHOCK.....INPUT.....TRANSPORTATION.....AUTOMOBILE.....

SEVERITIES TRAN ACCIDENT VOL 3 MOTOR CARRIER SEE A1630
TRUCK ACCIDENT REPORTS, NHTSA, NO. 7 UNC A1663-001+
UNC 01753-005+
TRUCK ACCIDENT REPORTS, NHTSA, NO. 8 UNC 01754-004+
TRUCK ACCIDENT REPORTS, NHTSA, NO. 9 UNC 01755-005+
TRUCK ACCIDENT, NHTSA, VOL.6, NO.10 UNC 01899-005+
TRUCK ACCIDENT, NHTSA, VOL.6, NO.12 UNC 01900-004+
TRUCK/PICKUP TRUCK W/CAMPER AND TRAILER COLLISION UNC 01901-015+
TRUCK TRACTOR-TRAILER/GROUND/ROLLOVER VOL 7, NO 1 UNC 01962-004+
TRUCK TRACTOR-SPORTS VAN IMPACT VOL 7, NO 1 UNC 01963-005+
TRUCK CAR ACCIDENT, BALTIMORE, MD, ON INTERSTATE UNC 01964-006+
TRUCK CAR ACCIDENT, REAR END UNDER-RIDE IMPACT, VOL 7 UNC 01965-006+

(CRUSH)SHOCK.....INPUT.....TRANSPORTATION.....RAILROAD.....

SEVERITIES TRAN ACCIDENT VOL 4 TRAIN SEE A1630
RAIL ACCIDENT, HOUSTON, TEXAS 21 SEPT, 1974 UNC A1986-001+
UNC 01893-014+

(CRUSH)SHOCK.....INPUT.....TRANSPORTATION.....OTHER.....

SEVERITIES OF TRANSPORTATION ACCIDENTS VOL 1 SUMMARY UNC A1630-006+

(CRUSH)SHOCK.....RESPONSE....TRANSPORTATION.....AUTOMOBILE.....

TRUCK ACCIDENT, NHTSA, VOL.6, NO.10 UNC 01899-005+
TRUCK ACCIDENT, NHTSA, VOL.6, NO.12 UNC 01900-004+
TRUCK/PICKUP TRUCK W/CAMPER AND TRAILER COLLISION UNC 01901-015+
TRUCK TRACTOR-TRAILER/GROUND/ROLLOVER VOL 7, NO 1 UNC 01962-004+
TRUCK TRACTOR-SPORTS VAN IMPACT VOL 7, NO 1 UNC 01963-005+
TRUCK CAR ACCIDENT, BALTIMORE, MD, ON INTERSTATE UNC 01964-006+
TRUCK CAR ACCIDENT, REAR END UNDER-RIDE IMPACT, VOL 7 UNC 01965-006+

(CRUSH)SHOCK.....RESPONSE....TRANSPORTATION.....RAILROAD.....

RAIL ACCIDENT, HOUSTON, TEXAS, 19 OCT 1971 UNC 01846-006+
RAIL ACCIDENT, CRESCENT CITY, 19 AUG 1970 UNC 01847-009+
RAIL ACCIDENT, HOUSTON, TEXAS 21 SEPT, 1974 UNC 01893-014+

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(IMPACT)SHOCK.....INPUT.....GENERAL.....AUTOMOBILE.....

TRUCK ACCIDENT SPEEDS A - SUMMARY
STATISTICAL STUDY OF TRUCK ACCIDENT SPEEDS UNC 01687-002+
 UNC 01698-012+

(IMPACT)SHOCK.....INPUT.....GENERAL.....RAILROAD.....

FREIGHT TRAIN ACCIDENTS, NUMBER OF CARS INVOLVED UNC 01729-007+

(IMPACT)SHOCK.....INPUT.....GENERAL.....OTHER.....

APPROXIMATE DURATION OF SOME SHORT ACCELERATION LOADS UNC 00734-001+

(IMPACT)SHOCK.....INPUT.....HANDLING.....OTHER.....

IMPACTS DUE TO LARGE DROPS WHEN LOADING
MAXIMUM DROPS, PACKAGES IN TRANSIT UNC 00342-001+
 UNC 01608-004+

(IMPACT)SHOCK.....INPUT.....TRANSPORTATION.....AIRCRAFT.....

SEVERITIES TRAN ACCIDENT VOL 2 CARGO AIRCRAFT SEE 1630
ANALYSIS OF DIRECTION OF LOADS IN AIRCRAFT ACCIDENTS UNC A1662-001+
ACCELERATION OF FLOOR-AIRCRAFT CRASHES UNC 00751-001+
ACCELERATION,AIRCRAFT CRASH-VARIOUS ANGLES OF IMPACT UNC 00752-001+
CRASH TEST,DC-7 AIRCRAFT UNC 00753-008+
CRASH TEST,CONSTELLATION AIRCRAFT UNC 01104-007+
CIVIL AVIATION ACCIDENT DATA - 1962 TO 1972 UNC 01105-018+
ANALYSIS OF CARGO A/C CRASH RECORDS CAB DATA UNC 01664-009+
CRASH IMPACT CONDITIONS, MULTI ENGINE TRANSPORT A/C UNC 01668-005+
SURVEY OF A/C CRASH SURVIVABILITY, CARGO AT A/C CG UNC 01670-029+
ACCIDENT DATA, MULTIENGINE AIRCRAFT UNC 01671-004+
A/C ACCIDENT DC8 62 SEPT 1970 UNC 01672-010+
A/C ACCIDENT MARTIN 404 OCT 1970 UNC 01676-003+
A/C ACCIDENT CONVAIR 580 DEC 1968 UNC 01677-003+
A/C ACCIDENT DEHAVIDILLAND DHC 16 FEB 1970 UNC 01678-003+
A/C ACCIDENT DOUGLAS C54D APRIL 1970 UNC 01679-003+
A/C ACCIDENT DC 9 JAN 1970 UNC 01680-003+
A/C ACCIDENT DC9 MAY 1970 UNC 01681-003+
A/C ACCIDENT SKYVAN SERIES 3 JULY 1970 UNC 01682-003+
A/C ACCIDENT DC9 32 SEPT 1970 UNC 01683-003+
A/C ACCIDENT DC8 63F SEPT 1970 UNC 01684-003+
AIRCRAFT ACCIDENT - BOEING 707 - 1/16/74 UNC 01686-003+
AIRCRAFT CRASH ENVIRONMENTS - NAVY UNC 01800-001+
AIRCRAFT ACCIDENT - CONVAIR 600 - 9/27/73 UNC 01819-001+
AIRCRAFT MIDAIR COLLISIONS UNC 01820-001+
AIRCRAFT DITCHING INVESTIGATION UNC 01822-002+
A/C CRASH,B707,BOSTON,3 NOV 1973 UNC 01823-002+
A RISK AND COMPARATIVE ANALYSIS OF NAVY AIRCRAFT DATA
ARMY ROTARY WING AIRCRAFT ACCIDENTS-COST STUDY 1970-71 UNC 01843-023+
FULL SCALE CRASH TEST OF A CH-47C HELICOPTER UNC 01857-001+
 UNC 01895-016+
 UNC 02024-040+

(IMPACT)SHOCK.....INPUT.....TRANSPORTATION.....AUTOMOBILE.....

TRUCK ACCIDENT ENVIRONMENT ANALYSIS TAC - STUDY ACCELERATIONS,AUTOMOBILE CRASH (HEAD-ON) DECELERATION PATTERNS FOR AUTOMOBILE HEAD-ON COLLISIONS ACCIDENT REPORT, TRUCK - VENTURA, CALIFORNIA, 8-18-71	UNC	C1944-002+
	UNC	00737-001+
	UNC	00738-001+
	UNC	01659-003+
(IMPACT) .....SHOCK.....INPUT.....TRANSPORTATION.....AUTOMOBILE.....		
TRUCK ACCIDENT-NEW JERSEY 9/21/72	UNC	01690-003+
TRUCK ACCIDENT-ARIZONA 8/31/70	UNC	01691-003+
TRUCK ACCIDENT-VIRGINIA 4/13/72	UNC	01692-003+
TRUCK ACCIDENT-PENN-9/5/71	UNC	01693-003+
TRUCK ACCIDENT-GEORGIA-6/4/71	UNC	01694-003+
TRUCK ACCIDENT-FLORIDA-8/8/71	UNC	01695-003+
TRUCK ACCIDENT-VIRGINIA-3/9/72	UNC	01696-003+
TRUCK ACCIDENT-TENN-5/13/72	UNC	01697-002+
RAIL/ROAD VEHICLE ACCIDENT, OKLAHOMA - 4/5/71-SEE 1710	UNC	01711-001+
RAIL/ROAD VEHICLE ACCIDENT, NEW YORK -3/24/72	UNC	01712-003+
RAIL/ROAD VEHICLE ACCIDENT, ILLINOIS -1/24/70-SEE 1714	UNC	01715-001+
TRUCK ACCIDENT REPORTS, NHTSA, NO. 7	UNC	01753-005+
TRUCK ACCIDENT REPORTS, NHTSA, NO. 8	UNC	01754-004+
TRUCK ACCIDENT REPORTS, NHTSA, NO. 9	UNC	01755-005+
TRUCK ACCIDENT REPORTS - BOSTON UNIV., 1973	UNC	01770-004+
TRUCK ACCIDENT REPORTS - NHTSA, NO. 3	UNC	01771-003+
RAIL-HIGHWAY GRADE CROSSING ACCIDENTS, 1972 (SEE 1775)	UNC	01776-001+
RAIL-HIGHWAY GRADE CROSSING ACCIDENTS, 1973 (SEE 1777)	UNC	01778-001+
TRUCK ACCIDENT - TENNESSEE - 8/27/73	UNC	01783-001+
TRUCK ACCIDENT - VIRGINIA - 4/13/72	UNC	01784-002+
TRUCK ACCIDENT - TEXAS - 3/7/73	UNC	01785-002+
TRUCK ACCIDENT - IOWA - 4/3/73	UNC	01786-001+
TRUCK ACCIDENT - VIRGINIA - 3/28/74	UNC	01787-003+
TRUCK ACCIDENT - MASSACHUSETTS - 10/18/73	UNC	01788-002+
TRUCK/BUS ACCIDENT, NEW JERSEY, 19 OCT 1973	UNC	01845-014+
TRUCK ACCIDENTS,NHTSA,FINAL REPORT	UNC	01875-019+
TRUCK ACCIDENTS,NHTSA,VOL6,NO.4	UNC	01876-003+
TRUCK ACCIDENTS,NHTSA,VOL6,NO.5	UNC	01877-004+
TRUCK ACCIDENTS,NHTSA,VOL6,NO.6	UNC	01878-008+
TRUCK ACCIDENTS,NHTSA,VOL6,NO.7	UNC	01879-006+
TRUCK ACCIDENTS,NHTSA,VOL6,NO.8	UNC	01880-011+
TRUCK ACCIDENTS,NHTSA,VOL6,NO.9	UNC	01881-014+
ACCIDENTS,CANADA,RAM CONTAINERS	UNC	01888-013+
AUTO COLLISION W/AND COLLAPSE OF BRIDGE, SILOAM, NC	UNC	01952-014+
TRUCK ACCIDENT, EXPLOSION/FIRE, EAGLE PASS, TEXAS	UNC	01953-011+
SCHOOLBUS/AUTO COLLISION/ROLLOVER, ASHLAND, OREGON	UNC	01954-017+
COLLISION OF TRUCK AND BUS, NEAR HAMILTON, GA JUN 1975	UNC	01955-009+
COLLISION OF WINNEBAGO MOTOR HOME W/BRIDGE 1 JUL 1975	UNC	01956-015+
COLLISION OF TRUCK AND CAR, LOVINGTON, NM 3 JAN 1976	UNC	01957-006+
CAR COLLISION, FRONT-TO-FRONT IMPACT TEST AT 60 MPH	UNC	01958-002+
GASOLINE TRUCK ACCIDENT, SEATTLE, WA 4 DEC 1975	UNC	01966-001+
TRACTOR TRAILER/CAR/SCHOOL BUS, REAR END, ROLLOVER	UNC	01967-005+
CAR BUS ACCIDENT, OVERLAND PARK, KANSAS 7 OCT 1975	UNC	01968-005+
STATION WAGON/TRAIN ACCIDENT, BALTIMORE, MD DEC 1975	UNC	01969-006+
TRACTOR TRAILER, REAR END AND ROLLOVER NY 1 JUL 1975	UNC	01970-005+
TRUCK ACCIDENT, TIRE BLEW OUT, IMPACT, NY 21 JUN 1975	UNC	01971-005+

(IMPACT)

.....SHOCK.....INPUT.....TRANSPORTATION.....AUTOMOBILE.....

STATION WAGON/SCHOOL BUS, HEAD ON, HAMBURG, NY SEP 1975	UNC	01972-005+
TRUCK/SCHOOL BUS/TRAIN ACCIDENT, ARKANSAS 11 SEP 1975	UNC	01973-005+
TRACTOR TRAILER, FRONT TO SIDE IMPACT FEB 1975	UNC	01974-006+
TRUCK CAR ACCIDENT INTERSECCION, BALTIMORE, MD FEB 1975	UNC	01975-006+
CAR/POLE/TRAIN SIDESWIPE IMPACT, LOS ANGLES 25 SEP 1975	UNC	01976-004+
TRUCK CAR ACCIDENT, REAR END, SAN DIEGO FREEWAY JAN 1976	UNC	01977-005+
UNDERIDE OVERRIDE INTERVEHICULAR COLLISIONS	UNC	02002-003+
TRUCK ACCIDENT, COLLISION LEFT ROADWAY WASHINGTON DC	UNC	02007-007+
TRUCK/VAN/AUTO ACCIDENT LEXINGTON VA 20 AUG 1976	UNC	02013-007+

(IMPACT)

.....SHOCK.....INPUT.....TRANSPORTATION.....RAILROAD.....

SEVERITIES TRAN ACCIDENT VOL 4 TRAIN SEE A1630 COLLISIONS, RAIL, HEAD ON AND REAR END	UNC	A1986-001+
	UNC	01665-006+
RAIL ACCIDENT TANK CAR RUPTURE, FIRE	UNC	01675-036+
TRANSPORT ACCIDENTS OF RAM 1948-1965 SEE EDB 1689	UNC	01700-011+
RAIL ACCIDENT, COTULLA, TEXAS - 12/1/73	UNC	01701-001+
RAIL ACCIDENT, INDIO, CALIFORNIA - 6/25/73	UNC	01702-001+
RAIL ACCIDENT, SALEM, ILLINOIS - 6/10/71	UNC	01703-002+
RAIL ACCIDENT, MAQUIN, ILLINOIS - 5/24/72	UNC	01704-001+
RAIL ACCIDENT, TAFT, LOUISIANA - 2/21/73	UNC	01705-006+
RAIL ACCIDENT, EAST ST LOUIS, ILLINOIS - 1/22/72	UNC	01706-003+
RAIL ACCIDENT, CRETE, NEBRASKA - 2/18/69	UNC	01707-003+
RAIL ACCIDENT, HOUSTON, TEXAS - 10/19/71	UNC	01708-001+
RAIL ACCIDENT, HERNDON, PENNSYLVANIA - 3/12/72	UNC	01709-003+
RAIL/ROAD VEHICLE ACCIDENT, OKLAHOMA - 4/5/71	UNC	01710-002+
RAIL/ROAD VEHICLE ACCIDENT, NEW YORK - 3/24/72-SEE 1712	UNC	01713-001+
RAIL/ROAD VEHICLE ACCIDENT, ILLINOIS - 1/24/70	UNC	01714-002+
RAIL-HIGHWAY GRADE CROSSING ACCIDENTS, 1972	UNC	01775-002+
RAIL-HIGHWAY GRADE CROSSING ACCIDENTS, 1973	UNC	01777-002+
RAIL ACCIDENT, ONEONTA, NY 12 FEB, 1974	UNC	01890-012+
RAIL ACCIDENT, MUSTANG, OK, 1SEPT, 1974	UNC	01892-010+
RAIL ACCIDENT, HEAD-IN, EL MONTE, CA 2 APR 1973	UNC	01925-004+
RAIL ACCIDENT, HEAD-ON, LUFKIN, TEXAS 18 NOV 1973	UNC	01926-003+
RAIL ACCIDENT, HEAD-ON, COBDEN, ILLINOIS 2 DEC 1973	UNC	01927-003+
RAIL ACCIDENT, HEAD-ON, PLAINVIEW, TEXAS 15 DEC 1973	UNC	01928-003+
RAIL ACCIDENT, HEAD-ON, ST LOUIS, MISSOURI 22 JUN 1974	UNC	01929-004+
RAIL ACCIDENT, HEAD-ON, MEMPHIS, TEN 24 JAN 1975	UNC	01930-003+
RAIL ACCIDENT, SIDE-ON, EARLS, TEXAS 29 NOV 1974	UNC	01931-003+
RAIL ACCIDENT, OPEN SWITCH, WINDHAM, OHIO 22 NOV 1973	UNC	01932-002+
RAIL ACCIDENT, RAKING, LAKE JUNCTION, NJ 17 JUN 1974	UNC	01933-004+
RAIL ACCIDENT, REAR END, HURRICANE, ALASKA 5 JUL 1975	UNC	01945-012+
RAIL ACCIDENT, REAR END, LEETONIA, OHIO 6 JUN 1975	UNC	01946-014+
RAIL ACCIDENT, REAR END, DUPO, ILLINOIS 3 JAN 1975	UNC	01947-004+
RAIL ACCIDENT, GRADE CROSSING, DEL MAR, CA 27 FEB 1974	UNC	01948-003+
RAIL ACCIDENT, BROKEN RAIL, THOMPSONTOWN, PA DEC 1974	UNC	01949-002+

(IMPACT)SHOCK.....INPUT.....TRANSPORTATION.....RAILROAD.....

RAIL ACCIDENT, GRADE CROSSING, TRACY, CA	9 MAR 1975	UNC	01950-015+
RAIL ACCIDENT, GRADE CROSSING, ELWOOD, IL	19 NOV 1975	UNC	01951-012+
RAIL ACCIDENT, UNPROTECTED GRADE CROSSING	7 FEB 1976	UNC	02010-006+
RAIL ACCIDENT, DERAILMENT JARRATT VA	5 MAY 1976	UNC	02011-013+
RAIL ACCIDENT, HEAD-ON 2 TRAINS PETTISVILLE OH		UNC	02012-008+
AUTOMATED WHEEL-ON-THE-GROUND DERAILMENT DETECTION SYS		UNC	02017-006+
BIRMINGHAM DERAILEMENT, TRACK GAGE WIDENS	16 JAN 1977	UNC	02023-002+

(IMPACT)SHOCK.....INPUT.....TRANSPORTATION.....SHIP.....

IMPACT, PENETRATION, SHIP COLLISION AND GROUNDING COLLISION - TUG/BARGE WITH BRIDGE		UNC	01550-001+
		UNC	01725-001+

(IMPACT)SHOCK.....INPUT.....TRANSPORTATION.....OTHER.....

SEVERITIES OF TRANSPORTATION ACCIDENTS VOL 1 SUMMARY		UNC	A1630-006+
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(IMPACT)SHOCK.....RESPONSE.....HANDLING.....OTHER.....

MAXIMUM DROPS, PACKAGES IN TRANSIT		UNC	01608-004+
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(IMPACT)SHOCK.....RESPONSE....TRANSPORTATION.....AIRCRAFT.....

SHOCK SPECTRA, STAGED A/C CRASH TESTS		UNC	01669-018+
SURVEY OF A/C CRASH SURVIVABILITY, CARGO AT A/C CG		UNC	01671-004+
A/C CRASH,B707,BOSTON,3 NOV 1973		UNC	01843-023+
FULL SCALE CRASH TEST OF A CH-47C HELICOPTER		UNC	02024-040+

(IMPACT)SHOCK.....RESPONSE....TRANSPORTATION.....AUTOMOBILE.....

CARGO RESPONSE TRUCK AND RAIL ACCIDENTS		UNC	01688-002+
TRANSPORT ACCIDENTS OF RAM 1948 TO 1965-UNITED KINGDOM		UNC	01689-011+
TRUCK ACCIDENT-FLORIDA-8/8/71		UNC	01695-003+
TRUCK ACCIDENTS,NHTSA,FINAL REPORT		UNC	01875-019+
TRUCK ACCIDENTS,NHTSA,VOL6,NO.4		UNC	01876-003+
TRUCK ACCIDENTS,NHTSA,VOL6,NO.5		UNC	01877-004+
TRUCK ACCIDENTS,NHTSA,VOL6,NO.6		UNC	01878-008+
TRUCK ACCIDENTS,NHTSA,VOL6,NO.7		UNC	01879-006+
TRUCK ACCIDENTS,NHTSA,VOL6,NO.8		UNC	01880-011+
TRUCK ACCIDENTS,NHTSA,VOL6,NO.9		UNC	01881-014+
ACCIDENTS,CANADA,RAM CONTAINERS		UNC	01888-013+
AUTO COLLISION W/AND COLLAPSE OF BRIDGE, SILOAM, NC		UNC	01952-014+
TRUCK ACCIDENT, EXPLOSION/FIRE, EAGLE PASS, TEXAS		UNC	01953-011+
SCHOOLBUS/AUTO COLLISION/ROLLOVER, ASHLAND, OREGON		UNC	01954-017+
COLLISION OF TRUCK AND BUS, NEAR HAMILTON, GA JUN 1975		UNC	01955-009+
COLLISION OF WINNEBAGO MOTOR HOME W/BRIDGE	1 JUL 1975	UNC	01956-015+

(IMPACT)

.....SHOCK.....RESPONSE...TRANSPORTATION.....AUTOMOBILE.....

COLLISION OF TRUCK AND CAR, LOVINGTON, NM	3 JAN 1976	UNC	01957-006+
CAR COLLISION, FRONT-TO-FRONT IMPACT TEST AT 60 MPH		UNC	01958-002+
GASOLINE TRUCK ACCIDENT, SEATTLE, WA	4 DEC 1975	UNC	01966-001+
TRACTOR TRAILER/CAR/SCHOOL BUS, REAR END, ROLLOVER		UNC	01967-005+
CAR BUS ACCIDENT, OVERLAND PARK, KANSAS	7 OCT 1975	UNC	01968-005+
STATION WAGON/TRAIN ACCIDENT, BALTIMORE, MD	DEC 1975	UNC	01969-006+
TRACTOR TRAILER, REAR END AND ROLLOVER NY	1 JUL 1975	UNC	01970-005+
TRUCK ACCIDENT, TIRE BLEW OUT, IMPACT, NY	21 JUN 1975	UNC	01971-005+
STATION WAGON/SCHOOL BUS, HEAD ON, HAMBURG, NY	SEP 1975	UNC	01972-005+
TRUCK/SCHOOL BUS/TRAIN ACCIDENT, ARKANSAS	11 SEP 1975	UNC	01973-005+
TRACTOR TRAILER, FRONT TO SIDE IMPACT	FEB 1975	UNC	01974-006+
TRUCK CAR ACCIDENT INTERSECIION, BALTIMORE, MD	FEB 1975	UNC	01975-006+
CAR/POLE/TRAIN SIDESWIPE IMPACT, LOS ANGLES	25 SEP 1975	UNC	01976-004+
TRUCK CAR ACCIDENT, REAR END, SAN DIEGO FREEWAY	JAN 1976	UNC	01977-005+
TRUCK ACCIDENT, COLLISION LEFT ROADWAY WASHINGTON DC		UNC	02007-007+
TRUCK/VAN/AUTO ACCIDENT LEXINGTON VA	20 AUG 1976	UNC	02013-007+

(IMPACT)

.....SHOCK.....RESPONSE...TRANSPORTATION.....RAILROAD.....

CARGO RESPONSE TRUCK AND RAIL ACCCIDENTS SEE EDB1688		UNC	01699-002+
RAIL ACCIDENT, ONEONTA, NY	12 FEB, 1974	UNC	01890-012+
RAIL ACCIDENT, MUSTANG, OK,	1 SEPT, 1974	UNC	01892-010+
RAIL ACCIDENT, HEAD-IN, EL MONTE, CA	2 APR 1973	UNC	01925-004+
RAIL ACCIDENT, HEAD-ON, LUFKIN, TEXAS	18 NOV 1973	UNC	01926-003+
RAIL ACCIDENT, HEAD-ON, COBDEN, ILLINOIS	2 DEC 1973	UNC	01927-003+
RAIL ACCIDENT, HEAD-ON, PLAINVIEW, TEXAS	15 DEC 1973	UNC	01928-003+
RAIL ACCIDENT, HEAD-ON, ST LOUIS, MISSOURI	22 JUN 1974	UNC	01929-004+
RAIL ACCIDENT, HEAD-ON, MEMPHIS, TEN	24 JAN 1975	UNC	01930-003+
RAIL ACCIDENT, SIDE-ON, EARLS, TEXAS	29 NOV 1974	UNC	01931-003+
RAIL ACCIDENT, OPEN SWITCH, WINDHAM, OHIO	22 NOV 1973	UNC	01932-002+
RAIL ACCIDENT, RAKING, LAKE JUNCTION, NJ	17 JUN 1974	UNC	01933-004+
RAIL ACCIDENT, REAR END, HURRICANE, ALASKA	5 JUL 1975	UNC	01945-012+
RAIL ACCIDENT, REAR END, LEETONIA, OHIO	6 JUN 1975	UNC	01946-014+
RAIL ACCIDENT, REAR END, DUPO, ILLINOIS	3 JAN 1975	UNC	01947-004+
RAIL ACCIDENT, GRADE CROSSING, DEL MAR, CA	27 FEB 1974	UNC	01948-003+
RAIL ACCIDENT, BROKEN RAIL, THOMPSONTOWN, PA	DEC 1976	UNC	01949-002+
RAIL ACCIDENT, GRADE CROSSING, TRACY, CA	9 MAR 1975	UNC	01950-015+
RAIL ACCIDENT, GRADE CROSSING, ELWOOD, IL	19 NOV 1975	UNC	01951-012+
RAIL ACCIDENT, UNPROTECTED GRADE CROSSING	7 FEB 1976	UNC	02010-006+
RAIL ACCIDENT, DERAILMENT JARRATT VA	5 MAY 1976	UNC	02011-013+
RAIL ACCIDENT, HEAD-ON 2 TRAINS PETTISVILLE OH		UNC	02012-008+
AUTOMATED WHEEL-ON-THE-GROUND DERAILMENT DETECTION SYS		UNC	02017-006+
BIRMINGHAM DERAILEMENT, TRACK GAGE WIDENS	16 JAN 1977	UNC	02023-002+

.....TEMPERATURE.....INPUT.....GENERAL.....OTHER.....

TYPHOON REPORT - PACIFIC OCEAN - 1959	UNC	01802-003+
TYPHOON REPORT - PACIFIC OCEAN - 1960	UNC	01803-003+
TYPHOON REPORT - PACIFIC OCEAN - 1961	UNC	01804-003+
TYPHOON REPORT - PACIFIC OCEAN - 1962	UNC	01805-004+
TYPHOON REPORT - PACIFIC OCEAN - 1963	UNC	01806-003+
TYPHOON REPORT - PACIFIC OCEAN - 1965	UNC	01807-003+

.....TEMPERATURE.....INPUT.....TRANSPORTATION.....AIRCRAFT.....

CRASH RESISTANT FLAMMABLE FLUIDS SYSTEM UH-1A COPTER	UNC	02001-003+
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(FIRE)TEMPERATURE.....INPUT.....GENERAL.....AIRCRAFT.....

AIRCRAFT ACCIDENTS INVOLVING FIRES 1963-1974 ANALYSIS	UNC	01940-002+
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(FIRE)TEMPERATURE.....INPUT.....GENERAL.....RAILROAD.....

FREIGHT TRAIN ACCIDENTS, NUMBER OF CARS INVOLVED	UNC	01729-007+
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(FIRE)TEMPERATURE.....INPUT.....GENERAL.....OTHER.....

FIRES, LIQUID HYDROCARBON FUEL, HEAT TRANSFER IN BURNING CONDITIONS OF PETROLEUM LIQUIDS	UNC	00517-011+
	UNC	00518-001+

(FIRE)TEMPERATURE.....INPUT.....TRANSPORTATION.....AIRCRAFT.....

SEVERITIES TRAN ACCIDENT VOL 2 CARGO AIRCRAFT SEE 1630	UNC	A1662-001+
CIVIL AVIATION ACCIDENT DATA - 1962 TO 1972	UNC	01664-009+
FIRE INFORMATION AIRCRAFT ACCIDENTS	UNC	01674-002+
A/C ACCIDENT MARTIN 404 OCT 1970	UNC	01677-003+
A/C ACCIDENT CONVAIR 580 DEC 1968	UNC	01678-003+
A/C ACCIDENT DOUGLAS C54D APRIL 1970	UNC	01680-003+
A/C ACCIDENT 747 12 SEPT 1970	UNC	01685-003+
A/C ACCIDENT DC8 63F SEPT 1970	UNC	01686-003+
AIRCRAFT ACCIDENT - BOEING 707 - 1/16/74	UNC	01800-001+
AIRCRAFT ACCIDENT - DC 8 - 6/20/73	UNC	01821-001+
A/C CRASH, B707, BOSTON, 3 NOV 1973	UNC	01843-023+

(FIRE)TEMPERATURE.....INPUT.....TRANSPORTATION.....AUTOMOBILE.....

SEVERITIES TRAN ACCIDENT VOL 3 MOTOR CARRIER SEE A1630	UNC	A1663-001+
FIRE TEMPERATURES-TRUCK	UNC	00520-001+
ACCIDENT REPORT, TRUCK - VENTURA, CALIFORNIA, 8-18-71	UNC	01659-003+
TRUCK ACCIDENT-VIRGINIA 4/13/72	UNC	01692-003+
TRUCK ACCIDENT-PENN-9/5/71	UNC	01693-003+
TRUCK ACCIDENT-TENN-5/13/72	UNC	01697-002+

(FIRE) TEMPERATURE INPUT TRANSPORTATION AUTOMOBILE

TRUCK ACCIDENT REPORTS, NHTSA, NO. 8	UNC	01754-004+
HYDROGEN TRANSPORT AND HANDLING EXPLOSION	UNC	01758-001+
TRUCK ACCIDENT - VIRGINIA - 4/13/72	UNC	01784-002+
TRUCK ACCIDENT - TEXAS - 3/7/73	UNC	01785-002+
TRUCK ACCIDENT - MASSACHUSETTS - 10/18/73	UNC	01788-002+
ACCIDENTS, CANADA, RAM CONTAINERS	UNC	01888-013+
CAR ACCIDENT, NHTSA, VOL. 6, NO. 11	UNC	01898-005+
TRUCK ACCIDENT, EXPLOSION/FIRE, EAGLE PASS, TEXAS	UNC	01953-011+
COLLISION OF WINNEBAGO MOTOR HOME W/BRIDGE 1 JUL 1975	UNC	01956-015+
TRUCK FIRE-ACCIDENT DATA - 1969	UNC	01960-009+
TRUCK FIRE-ACCIDENT DATA - 1971	UNC	01961-011+
TRUCK CAR ACCIDENT, BALTIMORE, MD, ON INTERSTATE	UNC	01964-006+
GASOLINE TRUCK ACCIDENT, SEATTLE, WA 4 DEC 1975	UNC	01966-001+
TRUCK ACCIDENT, TRI-STATE RIG, GILA BEND AZ	UNC	02006-006+

(FIRE) TEMPERATURE INPUT TRANSPORTATION RAILROAD

SEVERITIES TRAN ACCIDENT VOL 4 TRAIN SEE A1630	UNC	A1986-001+
FIRE TEMPERATURES-RAIL	UNC	00519-001+
RAIL ACCIDENT TANK CAR RUPTURE, FIRE	UNC	01675-036+
TRANSPORT ACCIDENTS OF RAM 1948-1965 SEE EDB 1689	UNC	01700-011+
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RAIL ACCIDENT, INDIO, CALIFORNIA - 6/25/73	UNC	01702-001+
RAIL ACCIDENT, SALEM, ILLINOIS - 6/10/71	UNC	01703-002+
RAIL ACCIDENT, MAQUIN, ILLINOIS - 5/24/72	UNC	01704-001+
RAIL ACCIDENT, TAFT, LOUISIANA - 2/21/73	UNC	01705-006+
RAIL ACCIDENT, EAST ST LOUIS, ILLINOIS - 1/22/72	UNC	01706-003+
RAIL ACCIDENT, HOUSTON, TEXAS - 10/19/71	UNC	01708-001+
RAIL ACCIDENT, HERNDON, PENNSYLVANIA - 3/12/72	UNC	01709-003+
RAIL ACCIDENT, DECATUR, ILL 19 JULY, 1974	UNC	01889-012+
RAIL ACCIDENT, ONEONTA, NY 12 FEB, 1974	UNC	01890-012+
RAIL ACCIDENT, BENSON, AR 24 MAY, 1973	UNC	01891-016+
RAIL ACCIDENT, MUSTANG, OK, 1 SEPT, 1974	UNC	01892-010+

(FIRE) TEMPERATURE INPUT TRANSPORTATION SHIP

FIRE TEMPERATURES-SHIP	UNC	00521-001+
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(FIRE) TEMPERATURE INPUT TRANSPORTATION OTHER

SEVERITIES OF TRANSPORTATION ACCIDENTS VOL 1 SUMMARY	UNC	A1630-006+
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(FIRE) TEMPERATURE RESPONSE TRANSPORTATION AIRCRAFT

A/C CRASH, B707, BOSTON, 3 NOV 1973	UNC	01843-023+
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(FIRE) TEMPERATURE RESPONSE TRANSPORTATION AUTOMOBILE

CARGO RESPONSE TRUCK AND RAIL ACCIDENTS TRANSPORT ACCIDENTS OF RAM 1948 TO 1965-UNITED KINGDOM	UNC	01688-002+
ACCIDENTS,CANADA,RAM CONTAINERS	UNC	01689-011+
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TRUCK CAR ACCIDENT, BALTIMORE, MD, ON INTERSTATE	UNC	01956-015+
GASOLINE TRUCK ACCIDENT, SEATTLE, WA 4 DEC 1975	UNC	01964-006+
TRUCK ACCIDENT, TRI-STATE RIG, GILA BEND AZ	UNC	01966-001+
	UNC	02006-006+

(FIRE) TEMPERATURE RESPONSE TRANSPORTATION RAILROAD

CARGO RESPONSE TRUCK AND RAIL ACCIDENTS SEE EDB1688	UNC	01699-002+
RAIL ACCIDENT,DECATUR,ILL 19 JULY,1974	UNC	01889-012+
RAIL ACCIDENT,ONEONTA,NY 12 FEB, 1974	UNC	01890-012+
RAIL ACCIDENT,BENSON,AR 24 MAY,1973	UNC	01891-016+
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..... WIND INPUT GENERAL OTHER

TROPICAL CYCLONES	UNC	01856-002+
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..... WIND INPUT TRANSPORTATION AIRCRAFT

HELICOPTER DOWNWASH DATA	UNC	01760-001+
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(STORM) WIND INPUT GENERAL OTHER

TORNADOS, FREQUENCY AND LOCATION - UNITED STATES	UNC	01541-011+
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TYPHOON REPORT - PACIFIC OCEAN - 1967	UNC	01809-003+
TYPHOON REPORT - PACIFIC OCEAN - 1968	UNC	01810-004+
TYPHOON REPORT - PACIFIC OCEAN - 1969	UNC	01811-002+
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