

Scientific Instruments Roll-Up

Instrument Name: _____

Scientific Instruments User Define

Instrument Name: _____

DDT&E: _____

Flight Unit: _____

Input Variables

Variable Name	Value
W WEIGHT (lbs)	_____
X: _____	_____
Y: _____	_____
Z: _____	_____

Learning

Learning & Production Rate Elects

Learning %:	100	_____
Production Rate Per Year:	1	_____
LRIP Step Down %:	5	_____
Production Starts at Unit:	1	_____
Rate %:	100	_____
LRIP Quantity:	0	_____
QNHA:	1	_____
Make %:	70	_____

Scientific Instruments

NAFCOM Automated Database Selection

- All Data Points
 - Manned
 - Unmanned
 - Earth Orbiting
 - Scientific
 - Observatory
 - Mapping/Meteorological
 - Communication
 - Positioning
 - Reconnaissance
 - Planetary
 - Inner Planet Explorer
 - Outer Planet Explorer
 - Lander
 - Probe
 - Launch Vehicle Stages
 - Liquid Stage
 - Solid Stage
 - Engines

Scientific Instruments NAFCOM99 Missions

Unmanned-Earth Orbiting

___ AE-3	___ IMP-6	___ OGO-5
___ AEROS-2	___ IMP-7	___ OGO-6
___ AMPTE-CCE	___ IMP-8	___ OSO-2
___ ANS-1	___ IRAS	___ OSO-3
___ ASTRO-1	___ ISEE-1	___ OSO-4
___ ATS-1	___ ISEE-3	___ OSO-5
___ ATS-2	___ IUE	___ OSO-6
___ ATS-3	___ LANDSAT-1	___ OSO-7
___ ATS-4	___ LANDSAT-2	___ OSO-8
___ ATS-5	___ LANDSAT-3	___ OSS-1
___ ATS-6	___ LANDSAT-4	___ Polar
___ COBE	___ LANDSAT-5	___ SAGE
___ COS-B	___ LANDSAT-6	___ San-Marco 5
___ DE-1	___ MAGSAT	___ SAS-1
___ DE-2	___ Nimbus-1	___ SAS-3
___ ERBS	___ Nimbus-3	___ SEASAT
___ ESSA-3	___ Nimbus-4	___ SME
___ EUVE	___ Nimbus-5	___ SMM
___ GOES-3	___ Nimbus-6	___ SMS-1
___ GEOS-4	___ Nimbus-7	___ Space Test
___ GRO	___ NOAA-9	___ TIROS-M
___ Hawkeye	___ NOAA-K	___ TIROS-N
___ HCCM	___ OAO-2	___ TOMS/EP
___ HEAO-1	___ OAO-3	___ Topex
___ HEAO-2	___ OAO-B	___ TRMM
___ HEAO-3	___ OGO-1	___ UARS
___ HST	___ OGO-2	___ Wind
___ IMP-1	___ OGO-4	___ XTE

Unmanned-Planetary

___ Galileo Orbiter	___ Mariner-8	___ Pioneer-8
___ Galileo Probe	___ Mariner-10	___ Pioneer-10
___ Lunar Orbiter	___ Mariner-12	___ Viking Lander
___ Magellan	___ Pioneer Venus	___ Viking Orbiter
___ Mariner-3	___ Pioneer-6	___ Voyager
___ Mariner-6		

Manned

___ Apollo-13	___ OSTA-3
___ Apollo-15	___ Shuttle Orbiter
___ ASTP	___ Skylab
___ OSTA-1	___ Spacelab

Scientific Instruments Specific Analogy

Instrument Name: _____

Weight: _____ (lbs) _____ (kgs)

Complexity Factor

DDT&E Cmplx. 1 _____

DDT&E Inher. 1 _____

Unit Cmplx. 1 _____

Thru-Puts (enter Costs as T1 Values in FY 1999\$ Millions)

DDT&E: _____

Flight Unit: _____

Learning

Learning & Production Rate Elects

Learning %: 100 _____

Production Rate Per Year: 1 _____

LRIP Step Down %: 5 _____

Production Starts at Unit: 1 _____

Rate %: 100 _____

LRIP Quantity: 0 _____

QNHA: 1 _____

Make %: 70 _____

Scientific Instruments Database Average

Instrument Name: _____

Weight: _____ (lbs) _____ (kgs)

Complexity Factor

DDT&E Cmplx. 1 _____

DDT&E Inher. 1 _____

Unit Cmplx. 1 _____

Thru-Puts (enter Costs as T1 Values in FY 1999\$ Millions)

DDT&E: _____

Flight Unit: _____

Learning

Learning & Production Rate Elects

Learning %: 100 _____

Production Rate Per Year: 1 _____

LRIP Step Down %: 5 _____

Production Starts at Unit: 1 _____

Rate %: 100 _____

LRIP Quantity: 0 _____

LRIP Quantity: 1 _____

LRIP Quantity: 70 _____

Scientific Instrument Filters

Mission Name

1st: _____
2nd: _____
3rd: _____

Instrument Name

1st: _____
2nd: _____
3rd: _____

Scientific Instruments Class

- | | |
|---|--|
| <input type="checkbox"/> Active Microwave | <input type="checkbox"/> Passive Microwave |
| <input type="checkbox"/> Charge and X-ray Detection | <input type="checkbox"/> Photometer |
| <input type="checkbox"/> Electric Field | <input type="checkbox"/> Plasma Probe |
| <input type="checkbox"/> Film Camera | <input type="checkbox"/> Pyrheliometer |
| <input type="checkbox"/> High Resolution Mapper | <input type="checkbox"/> Radiometer |
| <input type="checkbox"/> Interferometer | <input type="checkbox"/> Spectroheliograph |
| <input type="checkbox"/> Laser | <input type="checkbox"/> Spectrometer |
| <input type="checkbox"/> Magnetometer | <input type="checkbox"/> Telescope |
| <input type="checkbox"/> Mass Measurement | <input type="checkbox"/> TV Camera |
| <input type="checkbox"/> Miscellaneous | |

Average Input Power (watts)

From _____ To _____

Data Rate (kilobits per second)

From _____ To _____

Scientific Instrument Filters

Scientific Instrument Size

Weight (lbs.)

From _____ To _____

Volume (cubic ft.)

From _____ To _____

Scientific Instruments Programmatic Data

Lead Center

ARC
 British
 GSFC
 JPL
 JSC
 LaRC
 MSFC

Contract Type

Cost Plus Award Fee
 Cost Plus Fixed Fee
 Cost Plus Incentive Fee
 Fixed Price
 Firm Fixed Price
 Cost Reimbursable
 In House

Contract Start Year

From _____ To _____

Delivery Year

From _____ To _____

Launch Year

From _____ To _____

Contractor

1st: _____

2nd: _____
3rd: _____

Scientific Instrument Filters

Primary Mirror Diameter (in.)

From _____ To _____

Measurement Range

Magnetic Range (Gammas)

From _____ To _____

Frequency Range (KHz)

From _____ To _____

Mass Range (amu)

From _____ To _____

Frequency/Pulse Rate (GHz)

From _____ To _____

Spectral Range (angstroms)

From _____ To _____

Energy Range (KEV)

From _____ To _____

Bandwidth (MHz)

From _____ To _____

Pointing Accuracy (Arc – Sec.)

From _____ To _____

Spectral Resolution (Angstroms)

From _____ To _____

F-Number

From _____ To _____

Scientific Instrument Filters

Mechanisms Components

- | | | | |
|--------------------------|----------------|--------------------------|--------------|
| <input type="checkbox"/> | Antenna | <input type="checkbox"/> | Grating/Scan |
| <input type="checkbox"/> | Filter | <input type="checkbox"/> | Occulting |
| <input type="checkbox"/> | Flipper | <input type="checkbox"/> | Shutter |
| <input type="checkbox"/> | Focus/Pointing | | |

Search on Detectors

Enter Up to 3 Detectors

1st: _____
2nd: _____
3rd: _____

Optics Components

- | | | | |
|--------------------------|-----------------------|--------------------------|------------------------|
| <input type="checkbox"/> | Baffle/Collimator | <input type="checkbox"/> | Mirror/Lens |
| <input type="checkbox"/> | Beam Splitter | <input type="checkbox"/> | Monochromator |
| <input type="checkbox"/> | Filter | <input type="checkbox"/> | Occulting Disk |
| <input type="checkbox"/> | Fiber Optics | <input type="checkbox"/> | Telescope |
| <input type="checkbox"/> | Grating | <input type="checkbox"/> | Shutter/Occulting Slit |
| <input type="checkbox"/> | Gray Scale Calibrator | | |

Scientific Instrument Filters

Miscellaneous Components

<input type="checkbox"/>	Amplifier/Preamplifier	<input type="checkbox"/>	Magnetic Analyzer
<input type="checkbox"/>	Antenna	<input type="checkbox"/>	Magnetometer
<input type="checkbox"/>	Aspect System	<input type="checkbox"/>	Mount
<input type="checkbox"/>	Calibration	<input type="checkbox"/>	Receiver
<input type="checkbox"/>	Chirp Generator	<input type="checkbox"/>	RF Section
<input type="checkbox"/>	Controller/Combiner	<input type="checkbox"/>	Shielding Structure
<input type="checkbox"/>	Cooler	<input type="checkbox"/>	Spectrum Analyzer
<input type="checkbox"/>	Electrostatic Analyzer	<input type="checkbox"/>	Star/Sun Sensor
<input type="checkbox"/>	Interferometer	<input type="checkbox"/>	Time of Flight Component
<input type="checkbox"/>	Ion Collector	<input type="checkbox"/>	Traveling Wave Tube