

STATEMENT OF WORK (SOW)
NASA Boeing 747SP (SOFIA) Cavity Scaffolding
Revision – Basic
June 29, 2010

Background

The National Aeronautics and Space Administration (NASA) operates a Boeing 747SP aircraft as a flying astronomical observatory for Stratospheric Observation for Infrared Astronomy (SOFIA). This aircraft is operated by NASA Dryden Flight Research Center and is based at Dryden's Aircraft Operations Facility (DAOF) Palmdale, CA. This aircraft has been modified to accommodate a three meter telescope and operating mechanism with an independent door drive system. As owner and operator NASA has a requirement for access to the telescope cavity externally through the upper door opening, using a scaffold system.

Aircraft Information:

Type Aircraft	Boeing 747-SP-2
Engine Type	PW JT9D-7J
Mission	Flying Astronomical Observatory

Engineering, Design and Construction of an entry platform for personnel too access the SOFIA telescope cavity for maintenance and inspections.

- Provide engineering and design for an OSHA approved maintenance stand and entry platform
- Design entry scaffolding from SAFWAY scaffolding incorporating existing hardware owned by NASA
- Scaffolding must be constructed in such a way that it is capable of encompassing the exterior of the aircraft; personnel shall be able to enter the cavity from the Upper Ridged Door (URD) opening.
- This design and construction must be timely in order to support flight operations, customer demands, and flight schedule.
- Provide engineering support for scaffolding modifications to insure all potential access is obtained through cavity for required aircraft inspections.
- Period of performance (12) months July, 2010 to July 2011

SCAFFOLDING INVENTORY

<u>NOM</u>	<u>SIZE</u>	<u>QTY</u>		
FEET	LARGE	53		
CASTERS	LARGE	51		
STEPS	3 W X 12'L	1		
STEPS	4W X 12'L	1		
CLAMPS	STRAIGHT	155		
CLAMPS	SWIVEL	148		
PLANKS	38"L X 6"W	10		
PLANKS	38"L X 9"W	145		
PLANKS	45"L X 9"W	20		
PLANKS	55"L X 9"W	16		
PLANKS	68"L X 6"W	1		
PLANKS	68"L X 9"W	32		
PLANKS	72"L X 9"W	34		
PLANKS/ SUPPORTS	82"L	10		
VERTICAL POST	30"L	20		
VERTICAL POST	40"L	40		
VERTICAL POST	62"L	22		
VERTICAL POST	84"L	21		
VERTICAL POST	126"	10		
VERTICAL DIAGONALS	12"	20		
HORIZONTAL RUNNERS	34"L	4		
HORIZONTAL RUNNERS	40"L	195		
HORIZONTAL RUNNERS	46"L	40		
HORIZONTAL RUNNERS	58"L	33		
HORIZONTAL RUNNERS	70"L	22		
HORIZONTAL RUNNERS	82"L	22		
HORIZONTAL RUNNERS	180"L	8		
HORIZONTAL RUNNERS W/CLAMP	10'L	24		
CORNER BRACES/ SUPPORTS	36"	6		
CORNER BRACES/ SUPPORTS	24"	17		
LADDERS	6'	5		
LADDERS	4'	3		
BUMPER GAURDS	8'	16		