NOMINATION FOR AWARD

AWARD	CATEGORY (If Applicable)	AWARD PERIOD
General Thomas D. White Pollution Prevention Acquisition Award	Team	1 Oct 01 - 30 Sep 03

RANK/NAME OF NOMINEE (First, Middle Initial, Last)	SSN (Enter Last 4 Only)	MAJCOM, FOA, OR DRU
		AFMC

DAFSC/DUTY TITLE	NOMINEE'S TELEPHONE (DSN & Commercial)

UNIT/OFFICE SYMBOL/STREET ADDRESS/STATE/ZIP CODE

Wright-Patterson AFB, OH 45433-7626

RANK/NAME OF UNIT COMMANDER (First, Middle Initial, Last) /COMMANDER'S TELEPHONE (DSN & Commercial)

SPECIFIC ACCOMPLISHMENTS (Use single-spaced, bullet format)

INCORPORATING ENVIRONMENTAL ANALYSIS INTO ACQUISITION DECISION MAKING PROCESS:

- Improving Air Force Weapon Systems through comprehensive systems engineering processes!
- Developed Programmatic Environmental Safety & Health Evaluation tool to assess risk prior to full buy-in
- Administered Environmental Working Groups across major program offices, integrating P2 within acquisition
- Created Acquisition P2 Tech Transition Roadmap providing "one stop shopping" for analysis of alternatives
- Created Emerging Technologies Integrated Product Team--assisting acquisition program managers to identify P2 technologies that pose the least program implementation risk with the greatest rate of return on investment
- Implementing Environmental Management System (EMS) for decisions across ASC weapon system programs
  -- Provides information to analyze environmental hazards posed by weapon system production and sustainment
- Conducted ESOH analysis, identified over 200 new needs that were loaded into environmental plans database

IDENTIFYING AND IMPLEMENTING MATERIAL SUBSTITUTIONS:

- Leading transition of Environmentally Advantaged Radar Absorbing Material (RAM) coating to cut pollutants
  -- Saves B-2 program $3.9 million per maintenance cycle; cuts labor by 75% and reduces air pollution by 70%
- Validated sputter coat aluminum for corrosion protection of landing gear using ion vapor deposition technology
  -- Material substitution of aluminum eliminates over 150,000 gallons of cadmium/chromium and $400K/year
- Led thin film applique demonstration program including supersonic flight tests on fighters, gathering flight data
  -- Result--applique is the topcoat of choice for JSF, eliminating sprayed-on chromium based paint systems
- Implemented use of Matte Topcoat Cleaner for multiple weapon systems, including the C-17, C-130 and F-15
  -- Increases duration between repaints and touch-ups, resulting in significant reduction in HAZMAT usage
- Led effort to find non-ODS wipe solvent cleaner, implemented substitute for CFC-113, a major Class I ODS
- Reduced ODSs by 628,000 lbs/year (98%), eliminated 4,189 call-outs for HAZMATs in 416 technical orders
- Replaced isopropyl alcohol and HCFC-141b (Class II ODC) with high velocity water for cleaning jet engines

IDENTIFYING AND IMPLEMENTING PROCESS MODIFICATIONS AND IMPROVEMENTS:

- Implementing robotic laser work cell for stripping powder paints from composite surfaces--replacing current process of high pressure bead blasting which is labor intensive, hazardous, and creates a heavy waste stream
- Implemented High Velocity Oxygen Fuel thermal spray coatings to replace the volatile wet hard chrome plating
- Applied recycling process for jet engine turbine blades, saving $36M in life cycle costs for JSF program alone
- Worked with AFRL and paint vendors to improve topcoat, Life Cycle Cost savings of over $100M for C-17
- Implemented coolant recycler at machine shops eliminating 400,000 gallons/year of contaminated rinsewater
- Substituted CO2 for VOC solvents in "wet" painting of missiles, eliminated 100% (4,400 lbs/yr) of HAP/VOC
- Implemented Hydraulic Fluid Purification systems to reduce our #2 waste stream and save $12M-$15M a year

IMPROVING MATERIAL MANAGEMENT:

- Tracking weapon system baselined HAZMATS for reduction in P2 Cross Reference Systems across each major program office--comprehensive database of HAZMATs on board or used throughout life of the weapon
- Developing a database that provides, in one location, critical information about the characteristics, quantities, and management requirements of materials containing HAZMATS associated with aircraft throughout their life
- Managing comprehensive de-icing materials compatibility tests to determine impact to coatings on airframe
- Created web based searchable solutions database containing 300+ weapon system P2 tech transition projects

PROMOTING POLLUTION PREVENTION AWARENESS:

- Displayed info at ten major environmental conferences to more than 20,000 government and industry conferees
- Manager and Editor of only AF environmental publication "The Monitor", sent to 1,000+ subscribers quarterly
- Presented technical papers (e.g. De-icing, coatings, P2 solutions databases) at government and industry forums
- Educated over 1,200 ASC engineers in Operational Risk Management and its integration in systems designs
- Developed new AFIT school house weapon systems pollution prevention lessons for acquisition managers
- Institutionalized Eco-Effective Design/Sustainment concepts at AF plants, ensure environmental considerations