Federal Aviation Professional Nomination for
Managerial/Official Award:

Joseph M. Ginanni

Aviation Manager

US Department of Energy/National Nuclear Security Administration, Nevada Site Office

Bio

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Aviation Manager
National Nuclear Security Administration
Nevada Site Office

Mr. Ginanni has worked for the Nevada Site Office (NSO) since 1991. For the past five years, he has served as the NSO Aviation Manager, managing and overseeing the Management and Operating contractor's aviation services department and their operation and maintenance of NSO's five aircraft (3 Beechcraft King Airs and 2 Bell 412s) which are stationed at both Nellis AFB, NV and Andrews AFB, MD.

Prior to his position as Aviation Manager, he was the team leader for the Radioactive Waste Operations Team and the for the Characterization, Monitoring, and Sensor Technology program.

Mr. Ginanni's aviation experience includes 8 years of active duty in the USAF serving and an instructor pilot and aircraft commander in T-39 Sabreliners, instructor pilot in T-38s, deputy squadron flight safety officer, maintenance officer, and squadron section commander of a aviation maintenance squadron. He received his private pilot license at the age of 18 and currently holds a commercial pilot license for multi-engine and single-engine aircraft, an instrument rating, with type ratings in the LT-33 and NA-265. He is currently qualified as a mission pilot on the NSO's Radiological Emergency Response Beechcraft King Air.

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Program Summary

The National Nuclear Security Administration (NNSA), Nevada Site Office (NSO) operates a fleet of five aircraft consisting of three Beechcraft King Air B200s and two Bell 412s. The primary mission for these aircraft is emergency response using radiation detection and analysis equipment and electro-optical missions using cameras that are capable of taking images in the visible, near-visible, and infrared ranges. Three aircraft, two fixed-wing and one helicopter, are on 24/7 alert to respond to radiological emergency conditions throughout the continental United States.

The NSO aircraft are stationed at Nellis AFB, NV and Andrews AFB, MD. All aviation operations are conducted by a management and operating (M&O) contractor with federal oversight provided primarily by the federal Aviation Manager (AvM), Joseph Ginanni, and the federal aviation safety officer.

The Department of Energy (DOE) Office of Repository Development (ORD) has its field office in Las Vegas, NV. As their need for an aviation program is limited, the NSO aviation manager (AvM) provides that service for ORD also.

Through a memorandum of cooperation (MOC) between the NNSA and the U. S. Customs and Border Protection (CBP), NSO has the additional capability to execute the radiation assessment mission worldwide through the use of the CBP P-3 aircraft. CBP crews operate the aircraft, in which the radiation detection equipment can be readily installed. This equipment is operated by the M&O scientists and technicians. The P-3 crews are trained for this mission by NSO and NSO M&O personnel.

On occasion, charter aircraft are used for mission support if they are more cost effective or the federal aircraft are not available.

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1. What specific actions has your nominee taken to improve or sustain management and administration of your aviation program and aircraft operations (including CAS operations)?

Mr. Ginanni has applied his aviation management skills and abilities, obtained and developed through both military and civilian operations, to significantly improve the NSO and ORD aviation operations by:

- Contract changes directing the M&O contractor to track and report on the mission equipment metrics in addition to the aircraft.
- Directing an evaluation of potential cost savings if pilot flight time was calculated using block versus Hobbs meter time.
- Providing regulatory and guidance data to both NSO and ORD customer more effectively and efficiently.
- Assisting ORD in the development of their aviation program.
- Assisting ORD in the execution of their aerial surveys.
- Managing the joint NNSA/CBP program.

Due to the organizational structure of the M&O contractor, mission crews and equipment are in a separate division than aviation. As a result, the AvM was not able to direct the use of performance indicators for them. By initiating and obtaining the approval of a contract modification, those performance indicators are now being tracked, providing important management data regarding efficiencies, maintenance issues, and overall performance which are being used as a basis for the needs statement for new equipment, training, and personnel.

In past years, the M&O contractor had their pilots log their flight time based upon Hobbs meter readings which only accumulated hours when the aircraft were airborne. Believing that this was expensive for the program, in January 04, Mr. Ginanni directed that an evaluation and comparison of logging block time versus flight time be conducted. The results of the evaluation showed that a savings of approximately 15% could be realized. Based on that, the M&O was directed to change the pilot's flight hour logging method to block time. This change was also incorporated into FAIRS beginning FY 05.

In past years, ORD has had little need for aviation services therefore relied on NSO for support. As their program progressed, their needs increased significantly. Mr. Ginanni worked with them and their contractor for month, providing guidance for the formulation of their infrastructure to support an aviation program. He provided copies of documents that were required, developed lists of tasks that must be completed, and advised ORD management on methodologies to be used. As a result, ORD's program development is progressing rapidly without the false starts that developing same without day-to-day guidance by persons without experience commonly experience.

In addition to his assigned duties, Mr. Ginanni volunteered to assist ORD with execution of their aviation related tasks. As many of the elements were aerial surveys in restricted areas controlled by NNSA and the USAF, coordination for flights is imperative. Mr. Ginanni became the liaison

between the airspace controllers and ORD, introducing each to the other and facilitating the process. As ORD gains experience, they will be accomplishing this on their own.

Mr. Ginanni planned the training and exercises for the joint NNSA/CBP mission. The coordinated the schedules with the two CBP units, ensured that the NNSA M&O contractor was capable and prepared to execute their portion, and obtained and transferred funding to the appropriate organization. Through his efforts, all activities were executed on time and within budget.

He also expanded the NSO capability to support the joint mission. Previously, only the Nellis AFB location participated. During 2004, the capability was increased by the inclusion of M&O personnel from Andrews AFB. The increases the resources available while reducing the response time for these missions.

2. What has your nominee done in 2004 to improve your agency's policies and guidance for aviation operations management (for owned or hired aircraft)?

As both the program manager and a line pilot, Mr. Ginanni has been able to experience the result of policy and procedure changes and evaluate their effectiveness, resulting in an improved, more efficient program.

One example is the formulation of starting, run up, and taxiing training and certification of the aircraft maintenance technicians. Prior to this qualifications program, a line pilot was required to perform these tasks. That meant that the pilot was pulled away from his primary duties and, if no pilots were available, the maintenance diagnostics or confirmation of repairs had to wait until a pilot was available. Now, qualified maintenance technicians are able to perform these tasks resulting in a more efficient operation.

Working with the DOE HQ and the Federal Aviation Administration, Mr. Ginanni improved the procedures and the FAA Order 7610.4K for the use of both the FLYNET and SAMP missions flown by the DOE. In addition to his efforts with the order, he developed a formal request form for use by the Department when requesting overflight of restricted or sensitive areas for the purpose of a SAMP mission. This ensures that all of the information required by the FAA and TSA is included in one package, easing the process for obtaining these permissions.

Mr. Ginanni expanded the scope of the M&O contractor's oversight office. Employing the contractor's aviation safety oversight officer, CAS assessments can now be completed more efficiently. In addition, having an evaluator with a different perspective adds to the effectiveness of the effort.

Often the CAS operators must fly over Nevada Test Site (NTS), a 1375 square mile restricted area which is within restricted airspace. A concern was that the CAS pilots were unfamiliar with the procedures and restrictions while operating there. There had also been reports of the CAS aircraft, primarily helicopters, landing in unimproved areas with passengers.

To resolve these issues and increase safety, Mr. Ginanni had the CAS contracts changed to include the restrictions and to require the pilot flying the mission to be briefed by the Operations Control Center, which coordinates, schedules, and controls the airspace, before he/she was allowed to operate in the area.

In addition, Mr. Ginanni compiled a list of approved airfields and helistops at the NTS, plotted them on the site's chart, and had this chart included in the contracts along with the restriction

clause that prohibited passenger carrying aircraft from landing at other than these improved and maintained areas.

3. Has your nominee made exceptional contributions to fleet planning and ensuring that your agency has the optimum number, size, and type of aircraft to accomplish your agency's mission? Please describe.

During 2004, Mr. Ginanni was the NSO principle investigator for the analysis of the aircraft currently used by the Aerial Measuring System and development of alternatives to more effectively perform its emergency response mission efficiently.

The HQ program office, in order to provide more protection for the National Capitol Region (NCR), directed that the alert aircraft be dedicated to the NCR. This would have left the eastern portion of the nation with reduced protection as the aircraft would no longer be allowed to respond to other areas. Discussions were held concerning options for coverage of all areas at the same level as before the increased NCR coverage.

In the past, only fixed-wing aircraft performed the alert mission since they were capable of rapid transit to the emergency area. Proposals were made concerning transferring the second B200 from Nellis AFB NV to Andrews AFB, MD, using other agencies airplanes, or accepting the reduced coverage. Mr. Ginanni proposed that, since the helicopter currently stationed at Andrews did not have an emergency response requirement and that transit time would not be an issue since Andrews, AFB is just outside the Capitol Beltway, that the helicopter be given the NCR alert mission, freeing the fixed-wing to continue providing service to the eastern US. This would also be the least expensive since it would not require the transfer of an aircraft and its crews, would not require the purchase of another aircraft, and would not require the reliance on other agency aircraft which may or may not be available in the case of an emergency. Mr. Ginanni's proposal to use the helicopter was accepted. The helicopter started its alert mission on 1 October 04.

4. What has your nominee contributed to the management of aircraft operations and maintenance – whether for Federally-owned or CAS aircraft?

Although Mr. Ginanni is a line pilot in the fixed-wing aircraft, he also flies as an observer on helicopter missions. This allows him to evaluate the pilots, mission personnel, mission equipment, and procedures. This was of particular value when the Andrews helicopter pilots began conducting the alert mission. As a result of the observer flights and his experience flying the missions in the fixed-wing aircraft, he was able to point out weak areas in the performance of the mission and effect changes in methodology used.

Since Mr. Ginanni took over as AvM, the number, depth, and quality of the assessments of the maintenance section has increased. He expanded the scope of the evaluations to include the mission personnel who install the detector equipment. Although they are working under the supervision of an Airframe and Powerplant mechanic, he believed it was imperative that the mission personnel were properly trained for installation and followed the same procedures and cautions that a trained mechanic follows. This emphasis has improved consciousness of the mission personnel and the quality of the work performed by these people.

As a result of an improper installation of mission equipment, Mr. Ginanni investigated the installation methodology and procedures. He found that, although the procedure was detailed and correct, no checklist lists had been developed from them. As a result of this finding,

checklists have been developed for the mission personnel to use to confirm correct and complete installation.

One of the primary concerns when maintaining aircraft is the potential of an incident caused by a tool left in the aircraft. While the aviation section has the proper controls in place, they were often circumvented by the mission personnel installing the equipment using tools they brought with them that were not inventoried. Mr. Ginanni now conducts spots checks after equipment installation to confirm conformance with the workplace controls, significantly reducing the number of occurrences.

5. Describe your nominee's efforts to ensure the safety of your agency's personnel and aircraft operations (whether owned or contract) and to oversee training programs in support of safety and cost-effective operations?

Having had flight operations and aviation maintenance develop and implement events based training in 2003, the next step was for the M&O implement events based training for the mission crews. By initiating and obtaining a contract change, Mr. Ginanni was able to get events based training incorporated into the mission crew requirements. Before, the M&O had only a general syllabus with subjective grading criteria for these positions.

The M&O's flight slight department's operations manual previously contained a chapter on training. As a result of the changes resulting from Mr. Ginanni's reviews of the manual which resulted in the rewrite and update of all chapters, and the documentation of additional training requirement, it was found to be effective develop a separate training manual. This manual contains all of the requirements, including record keeping, for the training required by the department.

Through Mr. Ginanni's encouragement of additional, formal training for maintenance technicians, the M&O elected to have all of them complete the additional training need to obtain the Inspector Authorization for the A&P License at the company's expense. As a result, all of the M&O's aviation maintenance technicians are now have the IA license. This benefits the individual and the Department.

Mr. Ginanni ensures that flights operations are operating safely in a multitude of ways. By flying as a line pilot, he has repeated opportunity to evaluation the overall program safety and effectiveness of the program by observing maintenance practices, flight operations, and equipment installation and operations. He also flies as an observer on helicopter flights. During these flights, he is able to evaluate all phases of the mission from preflight to debriefing.

A mission plan/work package is prepared for all missions. These work packages contain a detailed job hazard analysis for all phases of the mission including the flight itself, weather, maintenance, hazards resulting from the items carried on the aircraft, etc plus a detailed scope of work. For each hazard identified, there is a method identified to mitigate it. For the local, routine missions (pilot proficiency, emergency response training, etc.), there is a blanket work package that covers all of the flights of each type such as pilot proficiency, aerial survey, and imagery missions. A separate work package is prepared for all other missions.

Each work package is reviewed by the aviation safety office, the mission manager, the aviation department manager, the company's safety department, and upper management. Once all of these have reviewed and approved, it is sent to the Mr. Ginanni for final review and approval. He has, on occasion, found items overlooked or incorrectly stated. His final look, being from a different perspective, has improved the quality of the package and the overall program safety.

Mr. Ginanni also performs a complete review of and has final approval authority for the operations and the training manual. In addition to the safety considerations, he confirms that the manuals conform to the Federal Aviation Regulations, DOE Order 440.2B, *Aviation Management and Safety*, and the Nevada Aviation Implementation Plan.

Prior to his intervention, mission crews were not protected by crew rest requirement. During on deployment, the mission scientist boarded an airliner at 10 PM, flew from Las Vegas to Washington, DC, worked all the next day installing and testing the survey equipment in the helicopter, flew on the helicopter to the deployment site approximately 2 hours away, then was expected to fly a 2 ½ hour mission. Fortunately, the mission was delayed until the next day. Mr. Ginanni's prohibition of a recurrence of this type of practice forced the M&O to formally adopt crew duty limitations for the mission personnel similar to that for the aircrews.

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6. What contributions has your nominee made to improving/sustaining your agency's effort to collect, report, analyze, and use cost and operations data to measure performance?

Calendar year 2003 saw the initial set of performance indicators incorporated into the monthly aviation program review with the M & O contractor. Based upon a year's worth of data, Mr. Ginanni found that tracking of some of the items recommended in the guidance document were of little value to the NSO operations and these indicators were archived and no longer monitored. Conversely, some data points that could be of value were not tracked and were added.

Mr. Ginanni also started compiling and providing data which would better show the headquarters program office the effectiveness of the programs. Utilization of the aircraft versus the number of flight hours and the amount of hours that the NSO aircraft performed work for others (WFO) or non-programmatic work were two that were of prime benefit.

All data required by FAIRS is provided as soon as it is available and reviewed. Every quarter, the synopsis provided by the DOE Office of Aviation Management for the NSO program is reviewed to determine trends and as another quality assurance check before the report is distributed to HQ and Field management.

To give more immediate feedback on which to base decisions, NSO tracks <u>monthly</u> data. This data is evaluated during each monthly program review that Mr. Ginanni holds with the M&O contractor. If discrepancies are detected, corrections are made before they become issues.