# U.S. Office of Personnel Management
# Classification Appeal Decision
# Under section 5112 of title 5, United States Code

**Appellants:** [appellants' names]

**Agency classification:** Air Traffic Control Specialist (Terminal)
GS-2152-12

**Organization:** Radar Approach Control
Airfield Operations Flight
[number] Operations Support Squadron
[number] Operations Group
[number] Flying Training Wing
Air Education and Training Command
U.S. Department of the Air Force
[geographic location]

**OPM decision:** Air Traffic Control Specialist (Terminal)
GS-2152-12

**OPM decision number:** C-2152-12-01

Judith A. Davis for

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Robert D. Hendler
Classification and Pay Claims
Program Manager
Merit System Audit and Compliance

10/1/2012

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Date

As provided in section 511.612 of title 5, Code of Federal Regulations (CFR), this decision constitutes a certificate which is mandatory and binding on all administrative, certifying, payroll, disbursing, and accounting officials of the Government. The agency is responsible for reviewing its classification decisions for identical, similar, or related positions to ensure consistency with this decision. There is no right of further appeal. This decision is subject to discretionary review only under conditions and time limits specified in the *Introduction to the Position Classification Standards* (*Introduction*), appendix 4, Section G (address provided in appendix 4, section H).

**Decision sent to:**

[appellants' names and addresses]

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## Introduction

On August 24, 2011, OPM's Dallas Oversight office accepted a classification appeal from [appellants' names]. The appellants occupy identical additional positions (hereinafter referred to as position) currently classified as Air Traffic Control (ATC) Specialist (Terminal), GS-2152-12, which they believe should be classified at the GS-13 grade level. The appellants work in the Radar Approach Control, Airfield Operations Flight, [number] Operations Support Squadron, [number] Operations Group, [number] Flying Training Wing (FTW), Air Education and Training Command (AETC), U.S. Department of the Air Force (USAF), at [name] Base (AFB), [geographic location]. We received the agency's administrative report (AAR) on May 15, 2012, and the appellants' comments on the report on May 18, 2012. The appellants perform essentially identical duties and are currently assigned to the same official position description (PD), number [number]. Therefore, we have processed this case as a group appeal. We have accepted and decided this appeal under section 5112 of title 5, United States Code (U.S.C.).

## Background and general issues

The Flight's civilian staff includes the appellants' position (organizationally titled Radar Air Traffic Controller); two GS-2152-12 positions (assigned to PD number [number], organizationally titled ATC Automation Specialist); and one GS-2152-12 position (assigned to PD number [number], organizationally titled Terminal Instrument Procedures Specialist). The OPM accepted and processed separate classification appeals from employees occupying each of the three PDs. While the classification appeals are adjudicated separately, the basis of the three appeals is essentially the same, i.e., the GS-2152 ATC work warrants a higher-grade level due to the traffic density of the AFB.

On July 16, 2006, the servicing human resources (HR) office reviewed the work performed under PD number [number], at the request of the employees occupying the PD at that time. The HR office determined the position was appropriately classified as ATC Specialist (Terminal), GS-2152-12. The employees then filed a classification appeal with the Department of Defense's Civilian Personnel Management Service (now the Defense Civilian Personnel Advisory Service). Their January 31, 2007, decision sustained the evaluation of the HR office.

The appellants said they are performing work similar to other USAF ATC positions assigned to less busy military airbases but classified at the GS-13 grade level. By law, we must classify positions solely by comparing their current duties and responsibilities to OPM position classification standards (PCS) and guidelines (5 U.S.C. 5106, 5107, and 5112). Since comparison to the PCSs and guidelines is the exclusive method for classifying positions, we cannot compare the appellants' current duties to other positions, which may or may not be classified properly, as a basis for deciding their appeal.

Like OPM, the USAF must classify positions based on comparison to OPM PCSs and guidelines. However, the agency also has primary responsibility for ensuring its positions are classified consistently with OPM appeal decisions. If the appellants consider their position so similar to others that they all warrant the same classification, they may pursue the matter by writing to the agency's headquarters. In doing so, they should specify the precise organizational location,

classification, duties, and responsibilities of the positions in question. If the positions are found to be basically the same as the appellants', the agency must correct the classification of the positions to be consistent with this appeal decision. Otherwise, the agency should explain to the appellants the differences between their position and the others.

**Position information**

The appellants are assigned to the Radar Approach Control (RAPCON) for the [number] FTW, an AETC pilot training unit based at the AFB near [city, state]. The FTW conducts specialized undergraduate pilot training for the USAF, Air Force Reserve, Air National Guard, and allied nation air forces. The RAPCON is delegated more than 10,000 square miles of airspace. The airspace covers from the surface up to 23,000 feet, extending 59 miles at the closest point east/southeast and 85 miles at the farthest point northwest. RAPCON's mission is to provide safe, orderly, and expeditious ATC support and services to aircraft transiting, originating, or terminating in the AFB's terminal airspace.

The purpose of the appellants' position is to provide ATC services to military and civilian aircraft operating in a radar environment using instrument flight rules (IFR) and visual flight rules (VFR), and to provide non-radar approach control services in the event of radar outages. The PD indicates the appellants spend approximately 25 percent of the time on four major duties. They are: (1) directing movement of aircraft in flight and on the ground, (2) operating communication and display equipment and providing emergency assistance to aircraft, (3) providing instruction and assistance to air traffic control personnel, and (4) maintaining certification requirements. We will discuss the appellants' ATC duties in more detail later in the decision.

The PD and other material of record provide more information about the appellants' duties and responsibilities and how they are performed. The appealed position is directly supervised by the RAPCON Chief Controller (Chief Master Sergeant military position). The Airfield Operations Flight Commander (Major military position) serves as the second-level supervisor. The appellants and first-level supervisor certify to the accuracy of the PD. We found the PD adequately captures the position's major duties, is adequate for classification purposes, and is therefore incorporated by reference into this decision.

To help decide this appeal, we conducted a telephone audit with several of the appellants on June 12, 2012, and a telephone interview with the first-level supervisor on August 27, 2012, and with the second-level supervisor on September 5, 2012. In reaching our classification decision, we carefully considered all of the information gained from these interviews, as well as the written information furnished by the appellants and the agency.

**Series, title, and standard determination**

The agency assigned the appellants' position to the GS-2152 Air Traffic Control Series, titled it ATC Specialist (Terminal), and applied Part II of the PCS for grading purposes. The appellants do not disagree and, after careful review of the record, we concur.

**Grade determination**

In Part II, the duties, responsibilities, and qualifications required to control air traffic in terminals vary according to the type of aircraft operation (i.e., visual or instrument flight rules) and whether radar is used. ATC terminals are differentiated into four major categories on the basis of the primary type of control services provided. These categories are nonapproach control terminal, nonradar approach control terminal, limited radar approach terminal, and radar approach control terminal.

In contrast with other terminal categories, radar approach control terminals are divided into two functional units: the radar or the instrument flight rules room and the tower cab. Generally, both of those two units are located within the same terminal facility, with controllers alternately performing radar control and tower cab duties. In some instances, however, the radar room and the tower cab are separate facilities, and controllers do not rotate between the two units. When a position, like the appellants', does not rotate between the tower and the radar room, the PCS cautions that the position must be evaluated with due consideration of the grade level relationship to the highest level of control work in the terminal.

The two classification factors differentiating work at the various grade levels for ATC positions in terminals are (1) knowledge, skills, and abilities required of the controllers which is directly related to the type of control services provided by the terminal, and the various procedures and techniques the controller must know and apply; and (2) the complexity of the control environment which is influenced most significantly by the demands from the density and congestion of aircraft place on the skills, abilities, and judgment of the controller. Particularly at the GS-10 level and above, the grade-level descriptions reflect that density affects the first factor as well as the second factor.

The PCS provides guidance for measuring traffic density. For radar approach terminals, traffic density is expressed in terms of the average hourly instrument operations handled during the day and evening shifts for the terminal's 183 busiest days of the year. This average of hourly instrument operations is computed by taking the total RAPCON air traffic count for the 183 busiest days of the year, dividing that number by 183 and then dividing that result by 16 for terminals which are open from 16 to 24 hours. OPM does not usually question the methodology an agency uses to measure aspects of the work performed such as air traffic density. Page 31 of the PCS states:

> It is not the intent of this standard to specifically identify each of these flight operations which may be included in the above definitions and which would be measured to determine the average hourly operation. The determination that a particular aircraft operation or maneuver meets the general definition of an aircraft or instrument operation is left to agency management.

Since traffic density significantly influences the grade level of controller positions, we will discuss this issue first. The appellants question how their agency determined the AFB's traffic density. The appellants and agency agree to 187,945 as the AFB's total number of instrument

operations for the busiest 183 days of fiscal year (FY) 2011. Moreover, a January 19th, 2012 USAF press release identified the appellants' AFB as the busiest airfield in the USAF for 2011.

To determine the number of hours the terminal is operational, the USAF Air Traffic Controller Career Field Functional Manager provided information as part of the AAR. He states: "…[organization] Radar Approach Control operating hours are based upon a 16 hour workday day Mon-Fri and Sundays 7 hours. Again these hours often flex and actually may require extended hours and Sat flying when local mission needs dictate." Assuming the 16 hours claimed by the agency, which is appropriate for terminals open from 16 to 24 hours, this equates to 64 instrument operations per hour. The appellants disagree. They state the AFB's RAPCON operates 15 minutes before the FTW's first departure until 15 minutes after the last landing, equaling an average of 13.1 hours daily for FY 2011. The first- and second-level supervisors concur. Assuming the 13.1 hours claimed by the appellants, this equates to 78 instrument operations per hour.

The appellants and supervisors, all individuals reasonably expected to have firsthand knowledge of the actual hours of operations, confirm the terminal was operational for approximately 13.1, not 16, hours per day in FY 2011. Thus, we applied the 78 operations per hour to evaluate the appellants' position. In terms of just numbers, the appellants' position, regardless of whether the 64 or 78 instrument operations per hour count is applied, meets the GS-13 level where terminals typically handle an average of 60 to 99 instrument operations hourly during day and evening shift periods.

However, the average operations per hour must be considered in context with other factors affecting the level of difficulty and responsibility of the appellants' position. The PCS describes the traffic density count as significant, but it does not portray it as a litmus test whereby traffic count serves as the single decisive factor. The PCS cautions against relying solely on traffic counts. Pages 7 and 8 of the PCS state:

> The traffic density ranges (i.e., average hourly operations counts) used in part II and part III of this standard were developed using flight operations data from the 1975-1976 period. Because of the many variables which may affect the difficulty and complexity of air traffic control work such as future technological changes to the equipment, changes in the aviation industry, differing patterns of growth and change in air traffic activity, and modification or extension of air traffic control services it may be necessary to periodically adjust the traffic density measures for differing categories of facilities and their respective work levels.

The average hourly operations count is so significant that a position cannot meet a particular grade level unless the traffic density range described in the PCS is first met; however, the position would not automatically be classified to that grade level without consideration of other factors. Therefore, the duties of the appellants' position are discussed in detail below in comparison to the two classification factors and the appropriate grade-level criteria.

*Knowledge, Skills, and Abilities Required*

This factor is directly related to the type of control services provided by the terminal and the various procedures and techniques that the controller must know and apply. In addition to the knowledge indicated for nonapproach, nonradar, and limited radar approach control terminals, controllers in terminal facilities providing full radar approach control services for air traffic are required to possess a comprehensive knowledge of the operational requirements and techniques for providing radar control and separation of aircraft. Controllers in radar terminals must apply knowledge of the function and operation of the radar equipment, its various displays, the adjustment of the equipment, and the ability to detect malfunctions and interference.

At the GS-12 level, the kinds of knowledge, skills, and abilities are similar to the GS-11 level (i.e., in addition to detailed knowledge of nonradar air traffic control, it requires a thorough knowledge of the functions and interference characteristics of radar systems, knowledge of and the ability to apply the reduced aircraft separation standards possible under radar, and the requirement to maintain a more positive and continuing control of aircraft). In comparison with the GS-11 radar controller who typically handles a light to medium density of traffic, the GS-12 controller is faced regularly with peaks of heavy traffic. Under the more restrictive time and space limitations imposed by the greater density of traffic, there is the requirement for greater precision in determining appropriate aircraft movements and formulating control instructions, more intense and precise coordination among the controllers, consideration of the effect of action by any specific aircraft on a larger number of other aircraft in the terminal airspace, and consideration of a large number of more rapidly changing aircraft positions and a greater variety of alternative actions for individual aircraft.

At the GS-13 level, the controller is distinguished from the GS-12 level by the significantly higher level of judgment, skill, and ability required controlling such an extremely heavy density of traffic that there are few lulls during which accumulated traffic can be easily moved. Thus, an error in judgment could result in major delays that would impact the movement of air traffic over a large area of the country. The GS-13 controller regularly has a complex, congested, and rapidly changing pattern of traffic under control for prolonged periods. This pattern typically consists of a variety of aircraft with widely varying speed and performance characteristics.

Under the conditions of extremely heavy density and congestion characteristic of the GS-13 level, controlling aircraft with widely varying performance characteristics requires an exceptionally high level of ability, and rapid and precise judgments. Such problems as determining what headings to issue an aircraft, and the precise moment to issue sequencing and spacing instructions so that separation is maintained (i.e., fast aircraft do not overtake slower ones) are substantially more complex than at the GS-12 level. To handle traffic under these conditions for prolonged periods of time requires the GS-13 controller to plan, listen, speak, and act almost simultaneously. Each sequence of control movements requires contacting several pilots and coordination with other controllers. Under these conditions, unexpected situations such as a sudden new rush of traffic, a declared emergency by an aircraft, or a sudden and severe change in weather conditions at the airport present problems of exceptional complexity for the GS-13 controller.

The appellants' position meets the GS-12 level. Similar to this level, the position requires detailed knowledge of radar ATC including knowledge and ability to apply the procedures and

techniques for controlling aircraft operating under IFR. The appellants issue instructions meeting Federal Aviation Administration (FAA) Order 7110.65, [organization] AFB Instruction 13-203, and other requirements regarding the safe and expeditious air traffic movement, separation, and sequencing. They also have a thorough knowledge of the communications and radar equipment used in terminal control. The appellants' knowledge and skill with the radar system allows for reduced levels of aircraft separation within the terminal airspace and allows them to maintain control of aircraft as described at the GS-12 level. As with many ATC specialists, the appellants provide on-the-job training in live traffic situations to student ATCs as well as instruction in the classroom and on the simulator. The GS-2152 PCS recognizes the full performance level controller is generally required to provide training for trainee and developmental controllers. Controllers at the GS-12 level routinely experience a heavy traffic density of 20 to 59 hourly instrument operations. The average traffic density of the appellants' position exceeds the GS-12 level at 78 operations per hour. The AFB's greater traffic density clearly imposes more restrictive time and spacing instructions, thus more intense and precise coordination among RAPCON controllers along with consideration of the effect of action by any aircraft on a larger number of aircraft in the terminal airspace.

However, the difference between the GS-12 and GS-13 levels is more than just numbers. The appellants assert the agency misconstrued facts of the position and terminal environment to support the GS-12 level. They provided OPM with a copy of the written responses to position-related questions asked by the agency for its evaluation of the appealed position. In response to the agency's position-related questions, the appellants cited and emphasized excerpts of the PCS (i.e., the TS-31), as follows:

> NOTE: TS-31 on page 25 states:
>
> *Also discussed below are those classification factors which have significant impact on the level of difficulty and responsibility of controller positions as a class, but which do not serve to distinguish among the full performance level controller positions. Therefore, these* ***non-distinguishing factors*** *are not discussed to any significant degree in other than the grade level descriptions for trainee and developmental positions.*
>
> NOTE: TS-31 on page 27 states:
>
> *Influence of other complexity factors. The complexity of terminal controller positions* ***may be further influenced*** *by a number of environmental and operational factors which controllers must deal with in assuring the safe, orderly and expeditious movement of aircraft.*
>
> NOTE: TS-31 on page 28 states:
>
> *The influence of these factors on the level of difficulty and complexity of individual controller positions is far less tangible than is density of traffic. Virtually all terminals will be found to have these or similar factors of varying kind and intensity associated with the control work.* ***Because of this, these factors by themselves serve no useful purpose in distinguishing among grade levels…***

> *To the extent possible the relationship between these environmental and operational factors and significant differences in traffic density is discussed in the grade level descriptions.* ***However, rarely, if ever, will any one or a combination of these environmental and operational factors become so significant as to materially affect the grade level of individual positions.***

Accepting this rationale requires determining that traffic density is the only classification factor of significance, thus rendering the remainder of the PCS unnecessary and superfluous. The PCS, however, makes distinctions between grade level based on comparison to two classification factors, i.e., knowledge, skills, and abilities required, and complexity of the control environment. The appellants' rationale suggests the PCS describes the characteristics depicted under the two classification factors as non-distinguishing features serving no useful purpose in making grade-level distinctions. The PCS, although portraying traffic density as the single most important characteristic, does not permit position classification decisions to be made in a vacuum based solely on the density of traffic.

Instead, the PCS draws a meaningful connection between the environmental and operational characteristics of an ATC position within the context of an average, medium, or high density of traffic. To illustrate, the PCS describes the complexity of the control environment at the GS-13 level as involving, e.g., complex runway and airspace configurations. By itself or in combination, the existence of complex runway and airspace configurations is indistinguishable and would not warrant crediting a position at the GS-13 level unless it also met the essential requirement of falling within the GS-13 traffic density range. Conversely, a position meeting the GS-13 traffic density range would not meet that grade level without consideration of the other characteristics depicted under the classification factors at the GS-13 grade level.

Although the appellants' position experiences a heavy traffic density consistent with the GS-13 level, our evaluation in comparison to the knowledge, skills, and abilities expected of the GS-13 controller follows.

Controls extremely heavy density of traffic. This condition is met. The appellants' position provides ATC services including sequencing; separation; advisories; vectoring; and initiating, relaying, and issuing ATC clearances and instructions under normal and emergency flight conditions. The appellants provide terminal ATC services to military and civilian aircraft operating in a radar environment using IFR and VFR flight plans within the delegated airspace. Operating hours of the RAPCON vary and are contingent upon the FTW's flying. Published hours of operation are from 7:00 a.m. to 7:00 p.m. Monday through Friday, and from 3:00 p.m. to 6:00 p.m. on the Sundays with non-holiday weekends.

The RAPCON staff includes the nine appellants, 36 to 38 qualified military controllers, and a fluctuating number of apprentice students. The staff works weekdays on one of two crews with typically 20 personnel on each crew. Operating instructions require a minimum of 12 qualified controllers on duty when the FTW conducts a Military Operations Area (MOA) operation. Weekend shifts are usually staffed with a minimum of four radar controllers and one Watch Supervisor, which handles reduced activity including aircraft returning to the AFB from cross-

country flights and launching aircraft to fly patterns in open airspace and returning to full-stop landings.

The AFB is located [number] miles east of [city, state], and [number] miles north of the border to Mexico. The RAPCON provides radar approach control service for the AFB, [name] International Airport ([airport initials]), [name] County Airport, [name] County Airport, and dozens of private ranch airports within the AFB's delegated airspace. Other terrain features include: hill country to the north through southeast; the border of Mexico to the south through west; mountains near [city, state], and further west; and [name] National Recreation Area to the west and northwest of the AFB. The Mexican border significantly impacts traffic flow; aircraft spacing and sequencing to the AFB, [airport initials], and [name] County airports may begin as far as 60 miles from the airport due to restrictions from the [name] Air Defense Identification Zone (ADIZ). The navigable airspace is confined by, e.g., the Mexican border, mountainous terrain, and restricted zone areas; and the appellants provide ATC services within the airspace for an extremely heavy density of traffic (78 instrument operations per hour), allowing for few lulls during which accumulated traffic can be easily moved. This heavy density and traffic congestion intensifies the demands placed on the appellants' skills, abilities, and judgment.

Errors in judgment result in major delays. This condition is not met. The PCS equates this impact to air traffic movement over a large area of the United States.

The delegated airspace spans more than 10,000 square miles, stretching from the surface to 23,000 feet and extending at its farthest point to 85 miles to the northwest and its closest point to 60 miles to the east and southeast. Surrounding terrain includes the border to Mexico as well as lake, hill, and mountain country; but the proximity to the border especially limits the traffic flowing west between the [airport initials] and the AFB. Movement through this area is also limited due to the mountains located near the border.

[Airport initials] is uncontrolled with aircraft departing off runways without the approval of the approach control, presenting conflicts with the AFB traffic. The [airport initials] lies to the west of the AFB, and most all traffic departing from the [airport initials] to destinations in the United States cross the AFB's departure or arrival corridors. The appellants provide ATC services to the [airport initials] and other civilian aircraft, responding and implementing proper control procedures from these unexpected traffic conditions. However, the [airport initials] has one commercial carrier with approximately [number] daily flights, and the RAPCON, at times closed when these flights are airborne, does not control all of the flights moving through their airspace.

The appellants' position is assigned to the FTW, an AETC pilot training unit with the mission of conducting joint specialized pilot training for the USAF, Air Force Reserve, Air National Guard, and allied nations. The RAPCON provides ATC services primarily to the military aircraft assigned to the FTW function. Taking into account the position's alignment with the functions of an undergraduate student pilot training base, the majority of the RAPCON traffic departing and arriving on the AFB are student pilots. Errors in judgment do not impact air traffic movement for a large area of the United States; instead, any impact is typically limited to the student pilot population and limited by the seclusion of the AFB resulting in the absence of the service demands typical for major airways and routes or a large volume of transient aircraft.

Regularly controls complex, congested, and rapidly changing pattern of traffic for prolonged periods. This condition is not met. The PCS describes this pattern as consisting of a variety of aircraft with widely varying speed and performance characteristics.

The FTW instructs pilots on three different planes including the T-1 Jayhawk, T-6 Texan, and T-38 Talon. Briefly, the T-1 is a medium-range, twin-engine jet trainer used in the advanced phase of specialized undergraduate pilot training for students selected to fly airlift or tanker aircraft. T-1 dimensions are 48 feet, 5 inches in length; 13 feet, 11 inches in height; and a potential range of 2,222 nautical miles. The T-6 is a single-engine, two-seat primary trainer used to instruct students in basic flying skills. T-6 dimensions are 33.4 feet in length; 10.7 feet in height; and a potential range of 900 nautical miles. The T-38 is a twin-engine, high-altitude, supersonic jet trainer used in the advanced phase of specialized undergraduate pilot training for students selected to fly bomber and fighter aircraft. T-38 dimensions are 46 feet, 4 inches in length; 12 feet, 10 inches in height; and a potential range of 1,093 nautical miles. All three trainers are classified as small aircraft of 41,000 pounds or less at maximum takeoff weight. The RAPCON also provides ATC services to aircraft operated by the Departments of Defense (DoD), Homeland Security, and Interior and others transiting the AFB's airspace.

Having to integrate aircraft with different performance characteristics into the same airspace raises the possibility for larger aircraft to overtake smaller ones. Different separation criteria and wake turbulence requirements also potentially slow an operation when incorporating heavier aircraft. The Chief Controller estimates that [number] percent of RAPCON traffic involves the military aircraft and the remaining [number] percent involves non-military transient aircraft. The T-1, T-6, and T-38 fly at different airspeeds depending on mission- and pilot-related factors, requiring the appellants apply keen attention to ensure the separation of aircraft. Although differences exist between the three small trainers, the PCS describes this condition as involving aircraft with widely varying performance characteristics in a combination of small, medium, and heavy types, rather than a number of aircraft within the same small weight class typical of the appellants' RAPCON.

Controls aircraft with widely varying performance characteristics. This condition is not met. The PCS describes this work as requiring an exceptionally high level of ability and rapid and precise judgments. Such problems as determining what headings to issue an aircraft, and the precise moment to issue sequencing and spacing instructions so that separation is maintained (i.e., fast aircraft do not overtake slower ones) are substantially more complex.

The RAPCON provides ATC services to the T-1, T-6, and T-38 trainers. The appellants said the T-38 has the highest final approach speed of any in the USAF, and the pilots of the T-38 routinely exercise a DoD waiver of the FAA speed limits in the terminal environment. The RAPCON also integrates traffic from helicopters patrolling the international border; air ambulances arriving and departing the regional medical center; and other transient aircraft of all airframe types. The appellants conclude the RAPCON controls aircraft with a varying mix of speed and performance characteristics.

All aircraft housed at the AFB are small trainers although speed characteristics vary between aircraft. The trainers have fly speeds between 210 and 500 knots requiring the appellants sequence aircraft by providing precise headings, altitude assignments, and speed adjustments. The T-1 has a maximum speed of 538 miles per hour, the T-6 at 320 miles per hour, and the T-38 at 812 miles per hour. The T-1 and T-6 have much slower final approach speeds than the T-38. Regardless, the PCS describes this condition as creditable when performance characteristics of the aircraft vary widely, i.e., it fluctuates and is largely unpredictable. With only three kinds of small aircraft regularly flying in the delegated airspace (it is these three aircraft, not the transient aircraft, that result in the extremely high traffic count), the performance characteristics of the aircraft controlled by the appellants cannot be characterized as being largely unpredictable.

Plans, listens, speaks, and acts almost simultaneously. This condition is met. The PCS describes this as the controller handling traffic for prolonged periods. Each sequence of control movements requires contacting several pilots and coordinating with other controllers.

The RAPCON provides approach control services to the AFB, [airport initials], [name] and [name] County Airports, and dozens of private ranch airports. The appellants also provide ATC services to air ambulances, charter aircraft, and Federal agency flights engaged in patrolling the border. When the flights coincide with the FTW's flying time, the appellants provide precise control instructions and engage in extensive, exact coordination with multiple internal and external AFB sectors to route flights through airspace containing controlled pilot training activity.

Moreover, the RAPCON provides services to mainly student pilots. Inexperienced pilots require continuous and vigilant monitoring to ensure aircraft maintain the required altitude, speed, path, etc. Student pilots regularly fail to immediately comprehend or comply with instructions (which is further complicated when involving pilots from allied nations), requiring appellants to engage in repeated and detailed explanations of control instructions. Also a consequence of the training environment, student pilots are restricted from flying through clouds while in the MOA. Having to divert student pilots around cloud layers requires the appellants to consider how airspace is being utilized, coordinate changes with other sectors, and reassign training areas all the while issuing instructions to student-piloted aircraft.

Resolves problems of exceptional complexity due to unexpected situations. This condition is not met. The PCS describes unexpected situations as involving a sudden new rush of traffic, a declared emergency by an aircraft, or sudden and severe changes in weather conditions at the airport.

The appellants said weather events outside the AFB's delegated airspace impact their airways (e.g., thunderstorms along [state] airways 90 to 185 miles away in [city], [city], [city], and [city]). The aircraft flying in those airspaces are rerouted through the AFB's airspace, thus increasing congestion and density while limiting space for corridors and MOA operations. No site is completely immune from the impact of weather, but the PCS describes the sudden and severe weather conditions as occurring at the airport, within the delegated airspace (as weather events inside the airspace trigger a direct, immediate impact on all aircraft as different flying statuses on approach and runway usage are issued).

The record does not support the conclusion that weather events or other unexpected situations at the AFB pose problems to the extent described in the PCS. For example, the AFB is typically dry and cloud-free, with the summers normally long, hot, and frequently humid while winters fluctuate between sunny, warm, and cool. Snow and freezing rain are rare. Although recognizing the irregularity of weather patterns, we considered the reported weather data for [city] in calendar year 2011. Of note, it shows 34 days with visibility at or less than three miles; 41 percent of the 34 days occurred in January and December. Data also shows 48 days with a fog, rain, and/or thunderstorm event; 23 percent of the 48 days occurred in December.

In summary, the RAPCON traffic volume interacts with other complexity factors to yield a grade level. The appellants' position meets only two of the six conditions described above; the GS-13 level is not met as traffic volume alone does not account for complexity; and the GS-12 level is assigned for this factor.

*Complexity of the Control Environment*

The complexity of controlling air traffic in terminals is influenced most significantly by the demands that the density and congestion of aircraft place on the skills, abilities, and judgment of the controller. As the level of air traffic increases significantly, there is a proportionally greater increase in the amount of coordination required among the controllers. Decisions on instructions to be issued to pilots become more critical. As the airspace becomes more congested, optional plans for the movement and control of aircraft are reduced. Increased numbers of aircraft require that controllers maintain increased alertness to a highly dynamic traffic picture.

The complexity of terminal controller positions may be further influenced by a number of environmental and operational factors which controllers must deal with in assuring the safe, orderly, and expeditious movement of aircraft. These factors include the varying mix in speed and performance characteristics of aircraft using the airport; limitations on the use of airspace imposed by such factors as noise abatement procedures, terrain, proximity of other airports, or the use of restrictive arrival and departure corridors; airport configuration in terms of runway and taxiway layout, lengths, and capacities; and provision of control services for satellite or secondary airports.

At the GS-12 level, radar terminals, because of the heavy density of traffic present, generally require 4 to 6 radar positions to be operational during the day and evening shifts. Because of the traffic demands, these positions tend to become more specialized in the particular control functions which they perform, e.g., a particular position may handle only arrival or departure traffic. More complex divisions of the control work and the assigned airspace are required at this level than in the GS-11 work situation. Thus more intricate procedures must be developed to insure that the necessary coordination is effected among controllers. The complicating environmental and operational factors described at the GS-11 level are intensified by the heavy density of traffic characteristic of this level. Such factors as several busy runways, a substantial volume of helicopter traffic, provision of radar service to a number of satellite airports, and restrictive noise abatement procedures influence the already high level of difficulty and complexity characteristic of the GS-12 level. Radar approach control terminals at this level

typically handle from 20 to 59 instrument operations per hour (average) during the day and evening shift periods.

At the GS-13 level, terminals regularly handle an extremely heavy density and congestion of air traffic, significantly heavier than the peak traffic periods characteristic of the GS-12 level. Also typical of this level are very complex configurations and sectorization of terminal airspace. This is reflected in a large number of navigational aids and specialized local procedures than is typical of the GS-12 level. Radar positions of operation at this level are more numerous and perform more specialized control functions. Because of the extremely heavy congestion of traffic as many as 7 to 10 radar positions may be required to handle such specialized functions as air traffic arrivals; departure traffic; operations at satellite airports; or the control of traffic transiting the assigned terminal area. Runway configurations are among the most complex and change frequently, requiring that controllers switch to different procedures for handling traffic many times during a typical work shift. Radar terminals at this level are typically located at major air carrier hub airports. These facilities are key terminals in the sense that delays occurring at these locations impact the movement of traffic over a large area of the country.

The demands placed on the skill, ability, and judgment of controllers at the GS-13 level by such factors as a large number of extremely complex configurations of airspace, restrictive arrival and departure corridors, complex and constantly changing runway configurations, noise abatement procedures, and mixtures of aircraft of different speed and weight categories are severely intensified by the extremely heavy density and congestion of traffic handled by the terminal, when compared to the relative difficulty and complexity of the terminal control environment at the GS-12 level. The GS-13 radar controller has an extremely complex, congested, and rapidly changing pattern of aircraft under control for prolonged periods. Pilot contacts and coordination with other controllers are practically continuous. The GS-13 level controller works under almost constant pressure to make exacting decisions, since errors in judgment or failure to expedite traffic could result in a major slowdown. Radar approach control terminals at this level typically handle from 60 to 99 instrument operations per hour (average) during the day and evening shift periods.

The appellants' position meets and somewhat exceeds the GS-12 level. For example, the AFB RAPCON is staffed with more than the four to six different radar positions cited at the GS-12 level to be operational during a shift. As at the GS-12 level, the AFB has developed intricate procedures to ensure necessary coordination among the controllers. The environmental and operational factors of the AFB terminal are also consistent with those described at the GS-12 level, e.g., busy runways, services provided to numerous satellite airports, and restrictive noise abatement procedures. Controllers at the GS-12 level experience a heavy traffic density of 20 to 59 hourly instrument operations; the appellants' position exceeds the GS-12 level with a traffic density count of 78 operations per hour.

Although the appellants' position experiences a heavy traffic density consistent with the GS-13 level, our evaluation in comparison to the complexity of the control environment expected at the GS-13 level follows.

Extremely heavy density and congestion of air traffic. This condition is met. The RAPCON provides ATC services for an extremely heavy traffic density (78 operations per hour). This heavy density and traffic congestion intensifies the coordination required by the appellants.

Very complex configurations and sectorization of terminal airspace. This condition is not met. The PCS describes this as evident when a larger number of navigational aids and specialized local procedures exist than the norm at the GS-12 level.

The RAPCON airspace extends upward to 23,000 feet from the surface within a 60- to 85-mile radius of the AFB and contains military, commercial, and general aviation air traffic. Environmental and operational factors include: one restricted area, three MOAs, dozens of private ranch airports, two navigational aids, and noise abatement procedures. The airspace is contiguous and consists of MOAs; Air Traffic Control Assigned Airspace (ATCAA); Alert Areas; Class A airspace where all operations are conducted under IFR unless otherwise authorized; Class C airspace surrounding airports with an operational control tower and serviced by a radar approach control; Class E airspace that includes controlled airspace not classifiable to another category; and Class G uncontrolled airspace requiring a waiver for the AFB instrument procedures to operate near the border of Mexico; and the [name] ADIZ. The appellants provide all aircraft in Class C airspace with sequencing, traffic advisories, and safety alerts.

The MOAs are used for student pilot training, where each MOA is a corresponding ATCAA. Areas routinely activate and deactivate. Briefly, MOA 1 extends from 9,000 feet mean sea level (MSL) to 17,999 feet MSL; the ATCAA begins at flight level (FL) 180 and extends to FL 230; and the MOA/ATCAA is divided into 11 separate areas further subdivided into 22 high and low sectors. MOA 2 extends from 7,000 feet MSL to 17,999 feet MSL; the ATCAA begins at FL 180 and extends to FL 230; and the MOA/ATCAA is divided into 10 separate areas further subdivided into 20 high and low sectors. MOA 3 extends from 7,000 feet MSL to 17,999 feet MSL; the ATCAA begins at FL 180 and extends to FL 230; and the MOA/ATCAA is divided into two separate areas further subdivided into four high and low sectors. In total, the RAPCON controls 46 subdivided sectors within the MOAs/ATCAAs. When MOAs are in use, the nonparticipating IFR traffic may be routed through the special use area if the RAPCON provides IFR separation.

Each controller assigned to a sector regularly coordinates with other internal sectors and the FAA's [city] Air Route Traffic Control Center (ARTCC), which overlies and surrounds the AFB's airspace. The AFB borders four ARTCC sectors, and the appellants routinely coordinate with the four ARTCC sectors (i.e., [city], [city], [city], and [city]). They also use the [city] ARTCC to relay IFR instructions to the [city] ARTCC. The appellants coordinate with the [city] Flight Service Station regarding flight departures, arrivals, and overflies within the AFB airspace.

The AFB uses a number of procedures typical of airports, e.g., the instrument landing system (ILS), high ILS, tactical air navigation system (TACAN), global positioning system, and VHF omnidirectional range (VOR)/distance measuring equipment. The AFB's two navigational aids, the TACAN and VOR, serve as the basis of the local procedures created for the T-1, T-6, and T-38 covering, e.g., different training scenarios, aircraft, speed, and other performance

characteristics. The appellants said they routinely control various aircraft conducting over 40 separate local procedures, which requires they constantly monitor the student pilots to ensure the aircraft adheres to correct altitudes and course restrictions to maintain separation.

Limitations resulting from noise abatement procedures may require re-sequencing aircraft as necessary to maintain efficiency. In this instance, the AFB is relatively secluded and the minimal noise abatement procedures are published in the [name] AFB Instruction 13-203, which describes the quiet and sterile periods as well as the noise abatement procedures impacting RAPCON operations (e.g., noise reduction on the base is required for various events, flying over [city] below 3000' MSL and over base housing below 2100' MSL are prohibited; and aircraft movement during ceremonial periods are limited). The minimal noise abatement procedures, combined with the airspace configuration and navigational aids in place, do not substantiate that the AFB's control environment involves so complex an airspace configuration and sectorization that a greater number of navigational aids and specialized local procedures is required than the usual at the GS-12 level (the PCS describes the GS-12 level as requiring more intricate procedures to ensure necessary coordination).

Radar positions of operation are more numerous and perform more specialized control functions. This condition is met. The PCS states that because of the extremely heavy traffic congestion, as many as 7 to 10 radar positions may be required to handle such specialized functions as air traffic arrivals, departure traffic, operations at satellite airports, or the control of traffic transiting the assigned area.

The Chief Controller confirms the RAPCON has a minimum of 12, but typically 20, civilian and military air traffic controllers working to cover radar positions when the FTW is conducting MOA operations. Student air traffic controllers may also be in training. The various RAPCON controller functions operational during a regular shift are numerous, as follows:

- East Approach Controller and Assist Controller. The primary and back up work departures from [airport initials], [name] County, and the runways 13C/31C, 31R, and 13L. The [airport initials] departures are routed over the AFB and to destinations east, northeast, and north of the AFB. Three miles of lateral or 1,000 feet of vertical separation is required within 40 miles of the AFB, increasing to five lateral miles if outside 40 miles of the AFB. In addition, aircraft within 1 ½ miles (within 40 miles of the AFB) or 2 ½ miles (outside 40 miles of the AFB) of another controller's airspace requires verbal or automated coordination with the appropriate controller. Departing aircraft from the east airspace to MOA 1, east, and to the north and northwest are identified by radar and ensured of initial departure separation before being handed off to another controller position. The T-6 aircraft departs the AFB and heads to [name] County via 15 miles east directly or after conducting training in MOA 2; going to [name] County puts the aircraft on the same path as aircraft descending for the AFB and [city]. Since aircraft are headed at each other, the East and Assist controllers ensure the aircraft maintain altitude separation until they pass each other or have the required three- to five-mile lateral separation. A single aircraft is allowed to conduct an instrument approach at [name] County, and the controller must have other aircraft hold over two different fix points.

- Clearance Delivery Controller. This position communicates with pilots prior to departure to confirm flight plan, altitude, vectoring, etc.

- Arrival Controller and Assist Controller. The primary and backup work the aircraft arriving at the airport into the traffic.

- West Approach Controller and Assist Controller. The primary and backup monitor an area with 10 sectors subdivided into high and low areas. The controllers assign aircraft to one of 20 possible areas based on the aircraft's flight profile, ensuring the aircraft stay in the assigned area by maintaining radar contact, issuing radio calls when aircraft stray, and notifying other controllers of the drifting aircraft when necessary. The T-38 aircraft conducts sorties requiring this position to accept a handoff from the East Controller, and then assigning the aircraft to a high and low area based on training needs while ensuring the route is clear of traffic. The T-1 also uses the MOA on their way to or back from another location, and the aircraft is assigned a high or low area. The [city] ARTCC maneuvers aircraft to two different fix points; this controller position keeps traffic flowing through the two fix points used by aircraft arriving the AFB above 8,000 feet to transit or descend into the AFB airspace.

- South Approach Controller and Assist Controller. The primary and backup monitor and mark aircraft for an area with 12 sectors subdivided into high and low areas.

- [Area name] Controller. This position monitors and marks aircraft within the [area name] MOA.

- Coordinator 1 and Coordinator 2. The positions provide the 'bigger picture' perspective by overseeing the management of the sectors, ensuring the safe, effective, and efficient movement of aircraft across the sectors.

The appellants are also qualified to be and rotate Watch Supervisor responsibility. The Watch Supervisor maintains situational awareness of the traffic and is responsible for the overall facility operations. This position is also responsible for ensuring radar positions are assigned to the right controllers with appropriate certification.

Most complex and frequently changing runway configurations. This condition is not met. The PCS describes this condition as requiring controllers to switch to different procedures for handling traffic many times during a work shift.

The AFB has three parallel runways (i.e., runways 13L/31R, 13C/31C, and 13R/31L). The centerline from runways 13C/31C to 13L/31R is 999 feet, and is 500 feet from runways 13C/31C to 13R/31L. Runways 13L, 13C, and 13R are designated as the calm-wind runways. Each runway is of considerably different lengths, requiring the controllers comply with precise arrival and departure profiles including wake turbulence, speed, and distance necessary when preparing for aircraft departures and arrivals to ensure aircraft separation. The appellants said that since each of the three runways has its own agency controlling the runway (i.e., the outside runway is

controlled by the [name] Runway Supervisory Unit (RSU), the center is the tower, and the inside is the [name] RSU), very complex scenarios are created requiring application of various procedures depending on the agency controlling the runway at any give time. When a runway change is required, the FTW's Supervisor of Flying makes the decision in coordination with the Tower Watch Supervisor. Overall, runway changes are rare at the AFB. Intersecting runways are generally a source of added complexity and operational deviations, but the AFB does not have crossing or converging runways. Thus, we conclude the appellants' position does not require increased communication, coordination, and situational awareness due to either complex or frequently changing runway configurations.

Situated at major air carrier hub airports. This condition is not met. The RAPCON is not located at a major air carrier hub or transfer point used by passengers en route to their intended destination. Overall, RAPCON traffic starts and stops at the AFB.

In summary, the RAPCON traffic volume interacts with other complexity factors to yield a grade level. The appellants' position meets only two of the five conditions described above; the GS-13 level is not met as traffic volume alone does not account for complexity; and the GS-12 level is assigned for this factor.

*Summary*

By application of the grading criteria in Part II of the GS-2152 PCS, we find the appellants' work meets the GS-12 level.

**Decision**

The position is properly classified as Air Traffic Control Specialist (Terminal), GS-2152-12.