



**Federal Aviation
Administration**

**Executive Summary
for
New York
Terminal Radar Approach
Control (TRACON)**

Operational Assessment

(March 2 – May 6, 2005)

June 2, 2005

Executive Summary

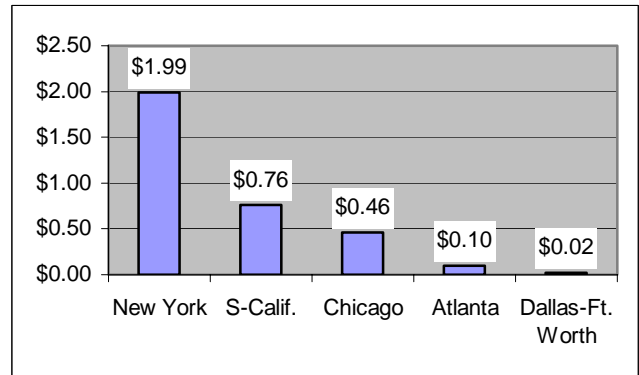
On March 2, 2005, the Federal Aviation Administration convened a team of safety experts, investigators, current and former air traffic controllers, and human resource and finance professionals to begin a 60-day on-site operational assessment of its New York Terminal Radar Approach Control (the New York TRACON) facility. The following is a summary of their findings and recommendations.

I. BACKGROUND

In the early 1990s, management at the New York TRACON entered into a series of agreements with local representatives from the National Air Traffic Controller’s Association (NATCA), the union that represents the FAA’s air traffic control workforce. By any standards these “partnership” agreements severely compromised management’s authority to set work schedules, determine staffing, and allocate overtime. As a result, at this facility, the union has enjoyed the ability to set the schedules for controller shift rotations and days off, resulting in an inefficient system that necessitates the use of a large amount of overtime.

The New York TRACON incurs by far the highest overtime costs of any large comparable facility, even though the facility has more controllers onboard and handles fewer operations per controller than most other large TRACONs. In 2004, New York spent \$4.12 million on overtime pay – more than double any other large TRACON. In comparison, Southern California TRACON handled almost 60,000 more operations yet spent \$1,628,122 in overtime. During the same time period, overtime costs per operation at Dallas, Atlanta, Southern California, and Chicago TRACONs ranged from 2 cents per operation to 76 cents. At New York, the overtime cost per operation was \$1.99.

FY04	Total Operations (IFR)	Total Controllers On board	Ops per Controller	Total Overtime
New York	2,066,708	210	9,841	\$4,122,971
Southern California	2,124,033	235	9,038	\$1,628,122
Chicago	1,502,382	74	20,302	\$696,672
Atlanta	1,386,610	69	20,095	\$148,545
Dallas Ft. Worth	1,305,622	90	14,506	\$34,829



Total Overtime Costs at Large TRACONs¹ (FY04)

Overtime Costs per Operation at Large TRACONs (FY04)

¹ In this report, large TRACON refers to Level-12 facilities handling similar traffic types & volume.

As a result of scheduling practices, 21 controllers at the New York TRACON earned over \$200,000 last year not including benefits. For 2005, approximately one out of every four controllers will earn over \$200,000². Average earnings for a controller at the New York TRACON last year were \$160,536, while controllers there guided aircraft for only an average of just three hours and 39 minutes per eight-hour shift, less than any other large TRACON. (By comparison, the average pay was \$155,068 at Southern California TRACON, where controllers worked an average of 5 hours and 6 minutes controlling aircraft.)

II. MANAGEMENT ACTIONS TO CURB OVERTIME

Lax oversight by management clearly contributed to the many problems found during this assessment. At the outset, the agency should never have signed agreements that ceded its basic rights and authorities; doing so led to wasteful scheduling practices. Moreover, local management should have been more aggressive in policing the environment at the facility. The culture that developed over the last fifteen years at the New York TRACON is thus a shared responsibility of the local union leadership and management at all levels of the FAA.

Acknowledging its responsibility, management began to take decisive action to improve oversight at the facility and eliminate waste. On June 10, 2004, management rescinded the provision in the 1998 agreement that allowed controllers to earn pre-approved “credit hours” on an unlimited basis. (“Credit hours” are extra hours voluntarily worked by controllers, who can then use them in lieu of annual leave, a practice that increases the need for other controllers to work overtime back-filling absences.) New procedures now require management approval for earning all credit hours. In September 2004, the Inspector General of the Department of Transportation issued a report that identified several areas of fraud, waste, and abuse at the New York TRACON. In response, management began contesting questionable “stress” claims filed with the Office of Workers’ Compensation Programs (OWCP) and took steps to reduce the amount of overtime. On January 18, 2005, management issued a memorandum requiring second-level approval of overtime. These memoranda are contained in Appendix 6 of this report.

Eight days after the announcement of these new overtime procedures, on January 26, 2005, the FAA began receiving numerous complaints of operational errors. These were reported anonymously to the Administrator’s Hotline, beginning on January 26, 2005. Between January 26, and March 2, 2005, eight anonymous calls alleged that previously unreported operational errors had occurred over 13 separate days. At the same time, NATCA officials publicly raised concerns that understaffing and reductions in overtime were creating an unsafe condition at the facility. Union representatives appeared on local New York television stations. A writing campaign began to pressure the agency to

² 50+ controllers are projected to make over \$200,000 in 2005. This amount does not include benefits; with the cost of benefits added, ___ controllers are expected to make over \$250,000 at New York TRACON in 2005.

remove the acting manager of the facility – a long-time FAA official who was taking steps to curb unnecessary overtime.

In response to the reports of operational errors and allegations of understaffing, an assessment team was assembled and placed onsite at New York TRACON. The team was comprised of air traffic personnel with experience in investigations and in facility management. It also included team members from other service areas, including human resources and finance.

On March 2, 2005, the FAA began its assessment of the facility. The on-site review lasted 60 days, and the team examined operational data, including an audit sampling of radar and voice data for the period January 31 to March 17. The team also reviewed facility scheduling practices, shift assignments, area assignments, use of leave and credit hours, assignment of overtime, time-on-position, and workers' compensation claims. Team members maintained a presence in the operating quarters of the facility, observed the control room environment, and conducted dozens of interviews with managers, supervisors, and employees. In addition, the team hired independent experts to perform studies of the staffing numbers, OWCP claims, sick leave usage, and the complexity of traffic levels at the New York TRACON.

III. FINDINGS

1. Unreported operational errors found during this assessment did not jeopardize safety.

In response to the anonymous calls to the Administrator's Hotline alleging unreported operational errors at the New York TRACON, which were first received on January 26, 2005, the team conducted an audit of both radar and voice data for the period of January 26 to March 17, 2005. The audit detected 147 previously unreported and confirmed 13 reported operational errors in three categories: failure to maintain separation on final approach, misapplication of wake turbulence standards, and failure to maintain lateral separation standards. Facility management responded immediately, ordering refresher training and increasing awareness of aircraft separation standards for all assigned controllers.

An operational error occurs when a controller fails to maintain the proper amount of space between two or more aircraft. The FAA uses a scale to determine the *potential* severity of the error. Merely because a controller has an operational error does not mean that safety has in fact been jeopardized. The majority of the errors discovered during the audit were "compression errors" on final approach, which are neither high severity nor uncontrolled violations of the separation standards. These are akin to driving 26 mph when the posted speed limit is 25. This separation standard requires controllers to keep planes three miles from each other. As a plane decreases speed on approach to the airport, trailing aircraft also must decrease accordingly. When this fails to occur in precise proportion, the line of aircraft becomes compressed, and a plane may come within 2.9 or 2.8 miles from the plane in front of it. This is counted as an error even though the

operation was completely safe. In fact, in most cases, neither the controller nor the supervisor watching would be able to tell that the aircraft separation had violated the standard, partially because there is no system that automatically flags the error - - in contrast to the high altitude air traffic control environment, where such automation exists -- and partially because the 'error' is so minor that one could not tell the difference. It is not until the radar data are collected and studied that these types of technical violations are discovered.

With the compression errors of the type detected in this audit there was essentially never any risk of collision, although the standards for separation were not rigidly followed. The team believes that this phenomena occurs at every major airport across the country. Which raises the question, if such errors occur thousands of times a year, and pose no risk to safety, why are they called errors? As a result of the findings, the FAA Administrator has asked the Air Traffic Organization to develop a sliding scale that permits variances in the separation standards during arrival phases. The team concluded that use of such a scale would be better for controllers and would allow the agency to identify actual safety risks.

The second category of errors involved misapplication of wake turbulence standards. Wake turbulence occurs when an aircraft leaves a ripple in the air similar to a speedboat's wake. This ripple has the potential to cause a problem for the pilot of the following aircraft if the plane creating the wake is a large widebody and the following aircraft is much smaller, as would be the case for a rowboat following an ocean liner. Failure to maintain wake turbulence separation accounted for the majority of Category 'A' (the more serious) and 'B' errors identified. But it is important to note that wake turbulence errors are categorized as serious because of their *potential* to cause a safety risk; the team did not find any evidence that any such errors created an actual safety concern. In fact, of the 61 wake turbulence errors, over 11 percent were attributed to the performance of just one controller, who has since been removed from his position and a suspension has been proposed. This individual will receive refresher and requalification training with an emphasis on wake turbulence separation before returning to duty.

The final category of errors, failure to maintain lateral separation standards, occurs when the projected flight paths of two or more aircraft intersect. All of such errors detected at the facility caused no risk to either aircraft. This number of moderate errors is consistent with the numbers of errors of this type found at other TRACONs throughout the system.

Of the 160 errors, 147 had not been previously reported. 79 of the errors (or almost half) occurred in the LaGuardia sector. In contrast, Newark, the busiest airspace in the TRACON, was next with 28 percent of the errors.

Management immediately imposed new requirements, including refresher training for all employees, and skill enhancement training for employees who had experienced an error. Supervisors also were ordered to be more vigilant in raising awareness of separation standards. The facility's acting manager also directed supervisors to issue on-the-spot corrections for non-compliance with air traffic protocols.

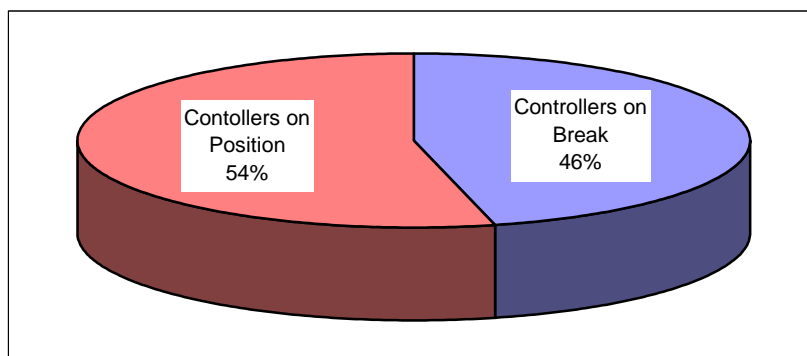
2. New York TRACON was not understaffed.

Historically, controller staffing levels at the New York TRACON have not been set according to operational standards or traffic analysis, but rather via a series of labor-management agreements, with the result that “authorized” staffing levels have no bearing on the number of controllers actually needed to safely and efficiently operate the system.

The New York TRACON is divided into five areas that correspond to the airspace around New York. Overall daily staffing levels for each area have been set according to a 1992 “partnership” accord between NATCA and management called the Facility Cooperative Team (FACT) Agreement, which are unrelated to current traffic demands and technological improvements. Through this “partnership” process, management agreed to a “three-team” scheduling approach (described in more detail below, at finding #5) that guarantees more controllers than are needed on certain weekdays, and fewer than are required on weekends, essentially dictating the constant reliance on overtime. Because of the high rate of absence (due to various forms of leave) many of the controllers at the New York TRACON actually work five days a week but are paid for six and one-half.

Importantly, the NATCA local currently controls the “watch schedule,” which sets the daily staffing requirements for each area. The schedule is generated by the union, and while it is ultimately approved by management, it has been set to adhere to the staffing levels that were agreed by the union and management in 1992. This agreement thus prevents management from making good business decisions about how to best use employees to meet traffic demands.

The team analyzed overall staffing at the New York TRACON, studied the specific staffing levels for each operational position during the time operational errors occurred, and conducted a broader review of overtime assignments at the facility. The team found that staffing was adequate to support safe operations at the facility.



Percentage of Controllers Available to Work
When Operational Errors Occurred at New York TRACON (Feb. 1 – Mar. 17, 2005)

The team also concluded that there was adequate staffing in each area when the operational errors occurred and that staffing levels did not correlate to the occurrence of errors. On average, at the time of the errors, almost half of the controllers at the facility were not on position. In addition, the team found that the errors occurred during times of moderate traffic volume and, on average, just 29 minutes into their time-on-position, indicating that fatigue was not a factor.

The facility is currently staffed at 225, a number that is short of the 270 figure put into prior union side agreements, which NATCA now cites as evidence of “understaffing” and as rationale for more and more overtime. The team concluded that the facility is more than adequately staffed to maintain safe operations. (A recent staffing authorization by the Air Traffic Organization’s finance team called for 170 controllers at the New York TRACON once the facility controllers were scheduled properly.) In fact, the team found that on average, the time-on-position for controllers was only 3 hours and 39 minutes during an eight-hour shift. That is far less than any other large TRACON.

3. The Quality Assurance Program at the New York TRACON has not been effective.

Like other air traffic facilities, the New York TRACON has performance programs in place to correct performance deficiencies by employees. The programs provide specific direction for the reporting, investigation of, and recording of air traffic incidents. The team concluded that the programs were not being properly implemented.

The team discovered that management’s attempts to correct individual performance under these programs were met with resistance from the local union, which in years past had the backing of upper level management at headquarters. Management had little or no presence on the operational floor, and supervisory personnel routinely failed to hold controllers accountable for insubordinate or unprofessional behavior; they also did not provide on-the-spot corrections when controllers made mistakes. The team listened to controllers describe how they were threatened with loss of lucrative overtime assignments if they opposed union actions.

The team, which included human resources and organizational development personnel, conducted a separate but concurrent preliminary assessment of the environment and operating culture at the New York TRACON. Their observations and conclusions are discussed in greater depth in finding #8, on page 52.

4. New York TRACON has the highest overtime cost per operation of any large TRACON.

The team conducted a detailed assessment of the use of overtime at the New York TRACON. As the charts on the first page of the Executive Summary indicate, the New York TRACON has the highest overtime costs of any TRACON in the country. The facility’s bill for overtime -- \$4.12 million – was more than 2.5 times that of the next most costly facility.

Even though the New York TRACON has more controllers and handles fewer operations per controller, its overtime cost is more than the overtime costs at Chicago, Atlanta, Dallas, and Southern California TRACONs *combined*. The New York TRACON costs \$1.99 per operation during overtime. The cost at Chicago is 46 cents and the cost at Dallas TRACON is 2 cents.

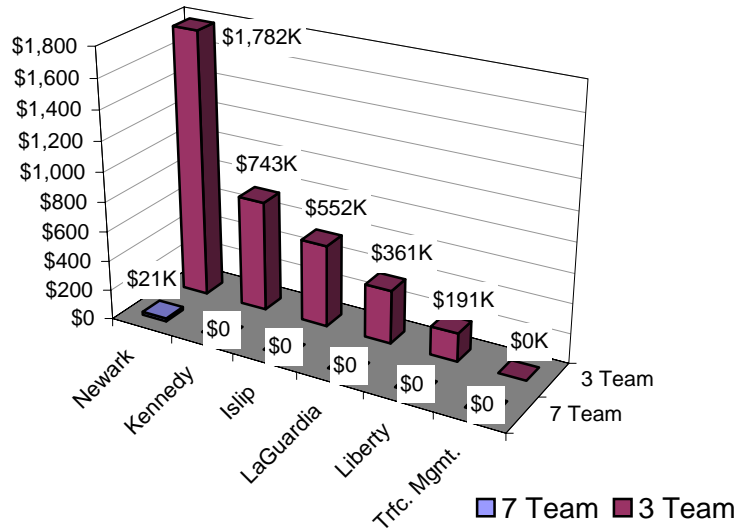
5. Current scheduling practices require unnecessary overtime to meet operational needs.

The New York TRACON uses a “three-team” scheduling system with negotiated staffing numbers that are fixed by area and divorced from actual traffic demands. Under this 3-team system, most employees have either Wednesday/Thursday, Friday/Saturday, or Sunday/Monday as regularly scheduled days off. The system produces too few controllers during peak periods of traffic. Instead of fostering efficiency, the schedule and staffing numbers trigger overtime expenditures as a matter of course. For example, under the current three-team schedule in the Newark airspace area of the New York TRACON, 16 more controllers are available to work on Tuesdays than are needed, while 10 controllers are scheduled for overtime on Saturdays and Sundays. This practice resulted in \$1,551,174 in overtime for controllers controlling traffic in the Newark area in 2004.

Areas within New York TRACON	FY04 Overtime	FY05 Overtime as of March 19, 2005
Newark	\$1,551,174	\$741,083
Kennedy	\$820,665	\$346,790
LaGuardia	\$731,741	\$532,975
Islip	\$500,011	\$221,128
Liberty	\$430,230	\$177,686
Traffic Mgmt. Unit	\$89,150	\$64,953
Total	\$4,122,971	\$2,084,615

Cost of Overtime with Current Schedule

If the New York TRACON changed from a three-team alignment to a seven-team scheduling system -- allowing for more even distribution of controllers by providing the number of controllers actually needed to cover the traffic and eliminate the need for scheduled overtime -- the FAA would save over *\$3.6 million per year*, as shown in the chart below. The seven-team schedule is currently employed at all other large TRACON facilities.



Projected Annual Overtime Expenditures at New York TRACON
Three-Team Schedule versus Seven-Team Schedule³

6. Schedule manipulation, low time-on-position, inappropriate use of sick leave, and high rates of OWCP at New York TRACON contribute to its high cost per Air Traffic operation.

Abuse of leave entitlements and schedule manipulation at the New York TRACON have dramatically increased operational costs. Specifically, the team uncovered evidence of schedule manipulation, inappropriate use of sick leave, and unusually high OWCP claim rates, all resulting in very low average time-on-position.

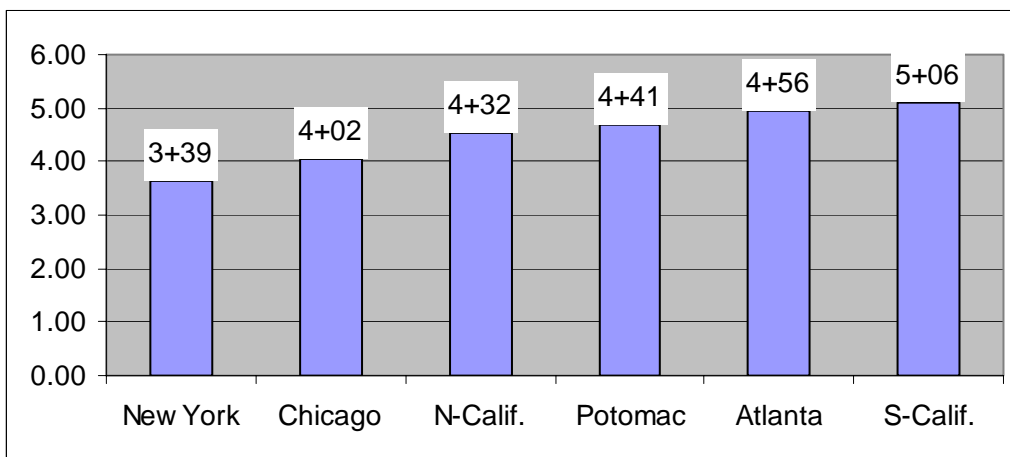
In the course of a year, the New York TRACON workforce typically uses 100 percent of the sick leave earned. Last year, absences due to use of sick leave and annual leave – and not traffic levels -- accounted for 56 percent of the facility’s overtime costs.

In addition, the team found that union control of the schedule facilitates manipulation that results in unnecessary overtime and habitual *overstaffing* of the facility. The team uncovered two examples of how such manipulation works. One controller calls in sick. Another controller agrees to come in on his/her day off to take the place of the “sick” controller. The replacement controller gets overtime, which is paid out at time and half. The replacement controller calls in “sick” during a subsequent pay period so that another controller is assured of overtime. Another pattern involves a controller showing up for work despite previously scheduled leave. Under the 1998 collective bargaining agreement, management cannot send the controller home. The controller who cancels his leave, comes in and is paid straight time. The controller that had been scheduled to

³ Projected annual overtime expenditures at New York TRACON are based on actual schedules for a single pay-period; annual totals were extrapolated for 26 pay-periods.

replace the controller who was to be on leave now gets overtime. In subsequent weeks- the controllers swap. As a result, some controllers actually only work 5 days, but are paid for 6 and one-half during a one week period.

The team also discovered that controllers at the New York TRACON typically worked less time on position -- time actually controlling aircraft -- than controllers at other large TRACONS. Again, practices put in place several years ago prevented effective management oversight of the situation. For example, most large TRACONS have an automated “sign in/sign out” tracking system that produces reports for easy monitoring. By agreement, New York uses a manual system.



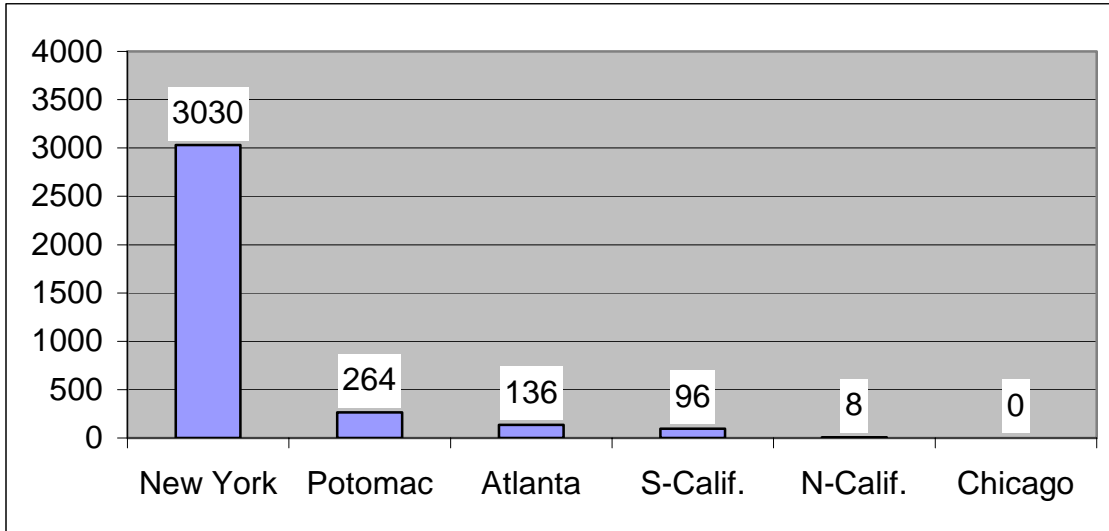
Time-on-Position Per 8-Hour Shift
(FY 05 year-to-date) for Large TRACONS⁴

In an eight-hour shift, controllers at the New York TRACON actually spend only three hours and 39 minutes handling aircraft. In contrast, controllers at the Chicago TRACON spend 4 hours and 2 minutes working traffic in an eight-hour shift, and, at Southern California, they work over five hours. The potential for abuse is also significant. The assessment team found that individuals were “signing on” without actually working traffic. As a result on May 9, 2005, management fired a local NATCA representative for falsifying time-on-position records.

Misuse of sick leave is also apparent. The team found that controllers routinely call in sick during the scheduled five-day workweek and then show up for overtime on their scheduled day-off, thus creating an apparent sixth “work” day. The result is five workdays with a full day being paid at time-and-a-half plus the paid sick day during one week. When an individual has exhausted annual leave or is unable to get approval for a day off, some controllers call in sick.

⁴ New York TRACON data for FY 05 were not available because of the lack of automated data collection capabilities. To complete this chart, the assessment team calculated time-on-position for one week (January 23-29, 2005).

Workers' Compensation Claims – largely for “stress ” -- are clearly excessive. At the New York TRACON, a medical doctor's note is not required to obtain workers' compensation. The facility lost 3,030 hours of work to such claims through the first 14 weeks of this year – the annual equivalent of four fulltime employees. In contrast, the Potomac TRACON lost just 264 hours to OWCP during the same period. In fact, the amount for Potomac, Atlanta, Southern California, Northern California and Chicago TRACONs *combined* during that period came to 504 hours, about 16 percent of New York's total. The Chicago TRACON lost no hours during this same time period.



OWCP Hours Used at Large TRACONs
(FY 05 year-to-date)

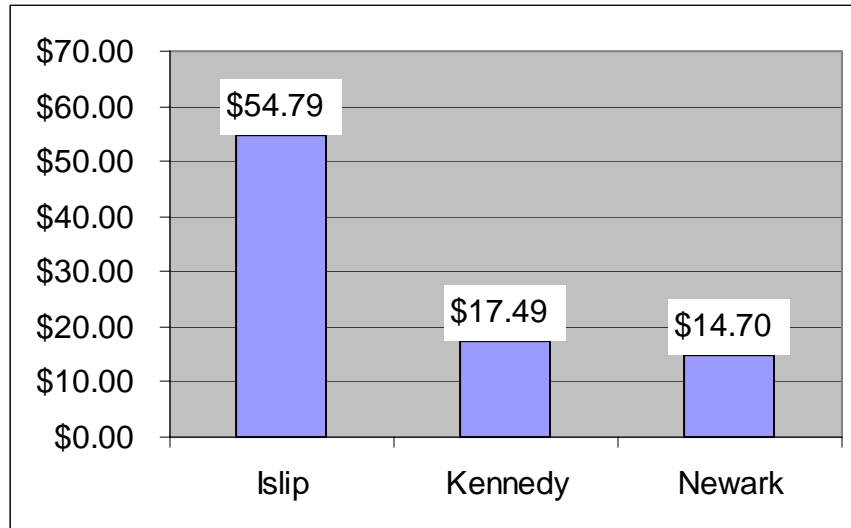
Likewise, credit hours also are the subject of abuse. In 2002, a Department of Transportation Inspector General investigation pointed to the 1998 controller agreement between the FAA and NATCA, which allowed controllers to earn unlimited credit hours without management approval. When the Acting Manager Jeff Clark rescinded this policy on June 10, 2004, credit hours earned dropped 95 percent. Credit hours drive up facility costs because they can be used much like annual leave, and thus very often require overtime to “backfill” for the controller off because of credit hours.

In 2004, another investigation by the Inspector General found overtime abuse at five locations, including the New York TRACON. When a “test” program that shifted the responsibility for approving overtime from the Supervisor to the Operations Manager was put in place, the IG was satisfied that the abuse would be curtailed. During the 10-week test, overtime dropped 21 percent at a savings of \$142,000.

7. Despite a sharp decrease in traffic counts in the Islip area staffing levels have remained constant.

Traffic counts in the Islip area have dipped from 787 per day to 523 per day. Islip originally was tasked with sequencing turbo-props from New England into the New York area airports. Largely, regional jets have replaced turboprops, and the traffic has been greatly reduced.

Because of this dip, the per-operation cost in this area has jumped dramatically and, including overtime, has reached \$54.79. For JFK and Newark, the numbers are \$17.49 and \$14.70, respectively.



Overtime Cost per Operation in New York TRACON Operational Areas

Despite the dip in traffic, staffing in this sector remains constant. Some 38 controllers remain in place to handle 33 percent less traffic. Nevertheless, overtime costs remain high, with Islip incurring \$500,011 in overtime last year.

The facility itself estimates that if the Islip Area were eliminated, an annual savings of \$8.6 million would result through normal attrition of the controllers assigned.

8. A culture of insubordination and intimidation exists at the New York TRACON that requires management attention to prevent derogation of safety.

The team included human resources and organizational development personnel who conducted a separate but concurrent assessment of the New York TRACON. The team interviewed dozens of employees, supervisors, and managers. The union refused to allow controllers to speak to members of the assessment team unless a union representative was present -- even in cases where the controller requested to do so. The team found evidence that following recent management decisions to reduce overtime and control credit hours, local union officials initiated a series of actions that were detrimental to the work environment. The team also discovered evidence of local NATCA officials

engaged in physical intimidation and harassment of non-bargaining unit employees. The assessment showed a facility whose working environment could be inconsistent with safe and efficient air traffic control.

The team found that management and the local union must share responsibility for the culture that developed over the last 15 years. Management abdicated its responsibility and allowed the union control of scheduling and overtime. Management also entered into the agreements with the local union officials that resulted in the staffing levels that generate much of the overtime. Supervisors allowed lower than average time-on-position and disrespect for the separation standards. However, the team found evidence that managers or supervisors who questioned abuses -- for example, time-on-position fraud -- were subjected to intimidation and threats from the local union. The assessment team documented one event in which security was called and an especially aggressive employee was removed from the premises. Female managers felt particularly at risk. The assessment team concluded that the union fosters this environment to maintain control. Threats are tolerated and merely documented by management as a means to avoid further confrontation. The team concluded that although most controllers at the facility are cooperative, the union has neutralized the effectiveness of the supervisory workforce through threats and intimidation. Some supervisors, rather than challenging the union, simply give in to union demands.

The acting manager has been in this capacity for 18 months. Because he had taken action to reduce overtime and credit hours, and had challenged questionable OWCP "stress" claims, the local union has repeatedly sought his removal. The team found, however, that the overwhelming majority of supervisors and managers supported him.

In connection with the investigation, on May 9, 2005, management terminated a NATCA representative for falsifying official facility records, providing misleading statements in connection with an official investigation, refusing to carry out orders, and engaging in inappropriate behavior.

IV. RECOMMENDATIONS

In response to the audit's detection of numerous unreported operational errors, management immediately imposed new requirements, including refresher training for all employees. Skill enhancement training also followed for employees who had committed an error. Supervisors were ordered to raise awareness of separation standards. The facility's acting manager also directed supervisors to issue on-the-spot corrections for improper terminology and procedures.

Because the vast majority of the errors were "compression errors" that pose no risk to safety, the team recommended that the FAA reevaluate the rating system and determine whether these technical violations of the separation standard should continue to be classified as errors. The team recommended that the agency consider adopting a sliding scale with a set-minimum for separating aircraft on final approach. For the more serious errors, the team recommended that enhanced training be provided to all personnel, quality

assurance programs be strengthened, on-the-spot corrections given to controllers who make mistakes, and that management should improve their oversight and presence on the control room floor.

The team concluded that the facility is more than adequately staffed and that staffing had no effect on the number of errors. It recommended that management immediately cancel the agreements that lead to the union exercising undue control over the work schedule, and adopt a seven-team schedule, which would save \$3.6 million per year by eliminating unnecessary overtime. In addition, a more rational, “seven-team” schedule would permit staffing the number of controllers actually needed to cover the traffic as well as provide a more equitable distribution of days off.

The team recommended that the FAA complete a study to implement revised staffing numbers.

In response to the extraordinary number of OWCP claims, findings of schedule manipulation, and evidence of intimidation and harassment by facility employees and local NATCA representatives, the team recommended that all relevant information be turned over to the Department of Transportation Inspector General for further review.

Finally, the team recommended several actions be taken to address its finding that as a result of recent management decisions to reduce overtime and control credit hours, incidents detrimental to the working environment have occurred involving a local NATCA officer and disruptive employees. First, management needs to take immediate action to address any threats or intimidation, and thereby recreate a professional environment in the control room. Second, management needs to take steps to restore control of resources through the daily schedule, curbing sick leave abuse, curbing excessive overtime, and establishing facility-staffing levels consistent with acceptable productivity and unit cost performance targets. Finally, the facility needs a permanent facility manager on-site.