MUNICIPALITY OF ANCHORAGE

ANCHORAGE POLICE DEPARTMENT

MEMORANDUM

DATE: July 18, 1994
TO: Duane S. Udland
Deputy Chief of Police

FROM: Captain Laren J. Zager
Commander, Staff Services

SUBJECT: Recommendations for Shift Changes

PURPOSE

As you recall, you recently tasked me with analyzing how best to staff and schedule Patrol. That analysis revealed that converting to a 5/8's shifting would resolve the staffing deficiency (and its subsequent problems, like overtime), but at a price. I also concluded that management must ultimately decide if that product is worth the price. The purpose of this memorandum is to offer you my recommendations in that decision.

BACKGROUND AND RECOMMENDATIONS

The interest in converting to 5/8's is not new. As you know, consultants have been hired in the past, and rebuttals submitted. Very little has been left unrevealed on either side of the argument. I feel the key to making the best decision now lies in reviewing those well established and articulated arguments in, if you will, the light of the current day." Rephrased, how do the variables and features fit into today's social, economic, and political environment, since each system of shifting excels under different conditions?

My personal conclusions are that the time has come for conversion to 5/8's. My reasoning follows.

REBUTTALS TO ARGUMENTS SUPPORTING 4/10'S

"5/8's Does Not Give More Personnel:"

In my analysis, a basic premise/conclusion is that 5/8's will "indisputably" give more available staff, but at a price. Advocates of 4/10's agree there is a price (naturally), <u>but will still dispute that it gives more staff.</u> The evidence offered to support this is simply not convincing. For instance:

It is argued that if an employee takes 240 hours of vacation, that translates to only <u>24</u> days of absence under the 4/10 plan, but <u>30</u> days of absence under 5/8's. When one factors in, say, 60 hours of sick leave per year (6 days versus 7.5 under 5/8's), training leave, and holidays, it turns out that each (average) employee will actually be available for duty less under the 5/8's plan than

the 4/10 System. If true and accurate, converting to 5/8's would make a bad situation worse.

This argument fails on several fronts, however:

> First, people do not submit for hours of vacation, or hours of sick leave, they submit in increments of days, weeks, or months, and the appropriate number of hours are deducted from their leave banks. For accuracy, leave is tracked in hours (actually, in quarter-hour increments), but taken in work days (with rare exception). Consequently, if an employee misses 10 days of work during the course of the year for illness, he/she will not be available for those 10 days under any system (but, ironically, will only lose 80 hours of leave under the 5/8's plan, but 100 hours of leave under the 4/10's).
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> Where this flaw in logic is particularly obvious is in the treatment of holidays. In the rebuttal against 5/8's, 115 hours of holiday leave is listed as 11.5 days under 4/10, but 14.357 days under 5/8's. Does that mean that, should APD convert to 5/8's, the municipality is going to authorize nearly three more holidays per year to fit this equation? Or does it mean that holidays, like sick days and vacation days, are given in increments of work days and not hours, and that the recognized, authorized 11.5 paid holidays will consume only 92 hours of absence under the 5/8's plan instead of the current 115?
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> Second, the argument fails to recognize that, under the 4/10's plan, the employee is gone that 5th day of every week of the year anyway -- it is part of his/her longer weekend. Advocates of 4/10's will state, "if an employee takes a month off of work (say 4 weeks for simplicity), he/she will miss 20 days of work under the 5/8's plan, but only 16 days of work under the 4/10's." Thus, the argument goes, people will be less available under 58's than 4/10's.
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> That would be true, I suppose, if the shift was 5/10's, but with 4/10's the employee is automatically missing the 5th day anyway (is not available for work because it is part of the employee's weekend). Under both systems, 4 weeks absence is 160 hours of leave. Under both systems the employee is gone 28 days.
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> These arguments are not just subjective or subtle: they are meaningless.

Conversely, the proof of 5/8's increasing "manpower" is found in basic mathematics. Who can defeat the statement that an employee would be available more work days per year if you increase his/her work week from 4 days to 5? Admittedly, there will be other consequences, but the fact that staffing availability will increase is arithmetically inescapable.

Consequently, I have no reservations in reporting to you that converting to 5/8's will provide a significant increase in personnel availability per shift per work day: in fact, the 24% plus increase reported in my analysis. Further, I submit that an increase of that magnitude would solve the current understaffing problem -- again, not without some other prices, but solve it nonetheless.

"5/8's Provides Insufficient Coverage During Shift Change:"

Advocates of the 4/10 system will quickly identify the most obvious weakness of a 5/8's system: the reduced "in-service" units at each shift change. Unquestionably, the overlap of the 4/10's is its strong suit, and the removal of that overlap one of the biggest sacrifices of the 5/8's plan. However, when the following is considered, a more realistic proportioning is possible:

1. The overlap that 4/10's provides is not just a happy coincidence of the system: It is a

costly, built-in feature. For 6 hours of every day, the city is paying for double staffing. This provides an excellent opportunity to perform the administrative functions of briefing and report writing, but it is not free.

2. The staffing “lows” of 5/8’s can be minimized, and are not as bad as first thought. Consider these three elements:

a. There are more alternatives to implementing 5/8’s than just having three, 8 hour shifts meet end to end (which gives no street staffing during shift change). For instance, one can divide those three basic shifts into six (each of them at one half the strength of the original three), and stagger their starting times to provide an overlap. This overlap would provide partial, but continuous, coverage while the underlying shifts are changing. This differs from the current 4/10’s overlap which has two fully staffed shifts overlapping, creating those expensive periods of double staffing. The problem is not the overlap -- it is the number of employees.

b. Note, too, that when the three basic shifts are split into six (as described above), a larger number is being divided in half since 5/8’s enjoys the added staffing. By example: If typical staffing under the current 4/10’s plan is, say, 20, then the 5/8’s plan would provide at least 24% more, or about 25 positions per shift. Dividing that in half gives one shift of 12 and another of 13. Dividing the 4/10’s base shift would give two shifts of only 10 each.

c. Finally, with only 20 positions filled in an average 4/10’s shift under current staffing, dropping below 12 being available (in service) is quite routine: Firearms training and qualifications on shift, vehicle maintenance on shift, several units going out for lunch or break together, units out of service on calls, and all the other normal business that constitutes the job.

One must wonder: What is the difference between a 4/10's shift starting with 20 having 10 units out of service (for the types of reasons just cited), and an umbrella shift of 12 "covering" for the two other shifts that are coming on or going off duty?" Not only is the coverage similar, but, as with the 4/10's overlap, both transitioning shifts would still be available for emergency calls or special projects.

Perhaps the most persuasive argument that 5/8’s is workable is the fact that most departments throughout the United States use it in some form. Lt. Tom Katkus, who attended Northwestern Traffic Institute, provided a study by William W. Stenzel and R. Michael Buren entitled “Police Work Scheduling: Management Issues and Practices,” that characterizes the average police system in America as:

> Three 8-hour shifts
> Duty cycle pattern of 5 on, 2 off (i.e. 5/8’s)
> 40 hour work week
> Rotating shift assignment
> Shift rotation every 4 weeks (trending towards longer rotations for stability)

> 11 holidays per year
> 10 vacation days per year after one year of service

Nothing in that study indicates a trend towards 4/10's. In fact, they report that only 25% of the departments have shifts longer than 8 hours, inferring that 75% of the departments in the United States are on some form of 5/8's program.

"5/8's is More Expensive Because of End of Shift Overtime:"

Another risk that proponents of 4/10 will ascribe to 5/8's is that of end-of-shift overtime. They predict that, without the overlap for report writing, 5/8's is doomed to cost more when large numbers of officers are routinely required to remain beyond shift to finish reports. Indeed, the more emotional faction virtually threatens to do this (which should raise the alarm with an alert supervisor). In evaluating this risk, I have considered the following;

1. An 8 hour shift will give a proportionately smaller number of calls for any individual officer to respond to, and thus a smaller number of reports for him/her to write. The mental picture of having to write the same number of reports as currently being done is understandable, but not entirely accurate.

2. One of the greatest selling points of 5/8's is a larger number of officers on the street. This would distribute the workload over a larger number of officers, thus reducing the number of calls per officer per hour.

Neither item, #1 nor #2 above, alone will have a strong impact; but combined, the results should at least be measurable.

3. 4/10's is not totally immune from this problem. Both plans run the risk of last minute calls that will generate overtime. Additionally, 4/10's is somewhat notorious for seducing an officer into delaying reports until the overlap, thinking there will be plenty of time to do it then -- only to find too many have stacked up to complete before the end of the shift.

4. Under any plan, it is always best to complete the report before going 10-8 from the call. This helps insure accuracy of the report (it is still fresh on the officer's mind, is not getting confused with other incidents, and the officer often retains immediate access to the involved parties), and allows the supervisor to review the reports while there is time to correct them. Further, the department is also considering an automated reporting system, the effectiveness of which is predicated on making "real time reports." From any angle, the department should consider an immediate policy change requiring the completion of reports as part of the call.

Implementing such a policy -- a policy consistent with most other jurisdictions -- would also facilitate 5/8's by minimizing the overtime risks of holding officers over for report writing purposes.

5. Finally, with the money saved on call-In overtime and holiday pay, the department would

be in a better position to pay such ad hoc costs. Certainly such periodic holdovers would be less expensive (even at time and a half) than routinely paying a full shift straight time 6 hours every day under the current double-staffed overlap periods.

Weighing the above, plus knowing that most other departments have coped with this, causes me to make this conclusion:

5/8's will almost certainly create some end of shift overtime, but that pales in comparison to the call-in overtime it saves. If supervisors are conditioned and required to collect reports in the field, evaluate them during the course of the shift, and be alert to abuses of end of shift overtime, not only will this risk be contained, but the general operation of the department would be enhanced in the process. Indeed, even without 5/8's, supervisors should be so encouraged.

FINANCIAL ASPECTS

In the analysis, I identified the known major cost features to both systems. For review, the breakdown is given here:

Gross Savings:

Call-in overtime eliminated by 5/8's	$575,640
Holiday pay saved by 5/8's	70,000
Subtotal	645,640
New Liabilities:	
Added meal allowance	42,380
Added home car expenses*	31,296
Added dry cleaning expenses*	10,000
Added end-of-shift overtime*	128,115
Subtotal	211,791
	<645,640>
	-211,791
Net Savings	<433,849>

*Note the following assumptions:

1. Meal allowances for existing patrol officers on 4/10's going to 5/8's would increase by $42,380. If patrol were up to authorized strength, this amount would be proportionately larger.

2. The allowance for added home car expenses was calculated as follows: Average commute distance 10 miles one way/20 mile round trip. Of the 52 weeks per year, 4 weeks off/inactive was subtracted, for a total of 48 extra commutes per year per car. There are currently 163 officers in patrol, yielding 156,480 "new" miles. Allowing a conventional 20 cents per mile for all costs gives $31,296 in new, additional commuting costs. However, from this liberal

allowance must be subtracted the personal use miles that off duty officers would have put on their home cars anyway on that day off.

3. The $10,000 allowance for additional dry cleaning expenses is an absolute guess.

4. The “new” after-shift overtime allowance was calculated as follows: If nine officers per day were given an hour overtime at time and a half, at an average base salary of $26 per hour, that would amount to $128,115 per year. I believe this, too, to be a liberal allowance, especially considering it is in addition to two other, common types of after shift overtime: FTO time with rookies, which is expensed as a training cost, and unaffected by the type of shift it falls in; and critical incident responses, whose costs are expensed to that incident (again, critical incident costs are not attached to, nor affected by, the type of shift the officers work -- only by the number of officers involved). Consequently, the allocation of $128,115 per year is expressly and solely for writing reports past the end of the shift, when overtime slips are submitted.

My belief is that the initial (first) years saving will be right at $400,000 (because of start up costs, inefficiencies, and what might be termed retaliatory overtime), and subsequent years closer to $500,000.

Not surprisingly, my recommendation to convert to 5/8’s is based in large part on not being able to ignore savings -- guaranteed savings -- of this magnitude and, in the process, increasing the available staff by fully 25%.

MISCELLANEOUS

There are several miscellaneous considerations to be made regarding implementation of a 5/8’s program at the Anchorage Police Department. These include:

1. A weakness of any shift program that lacks a double-staffed overlap (as is the case with nearly all 5/8’s plans) is the lack of coverage during shift changes. Certainly anything that minimizes the amount of time it takes for shifts to change would facilitate the viability of such a program. Fortuitously, our home car program does just that. While many departments have to suffer with the ongoing shift waiting for the old Shift to come in to swap cars, or having to go from fallout to the lot and “find” and load individual fleet cars, our department enjoys assigned automobiles.

2. As mentioned earlier, many of our developing programs (most notably the automated reporting) are quite consistent with 5/8’s shifting.

3. The implementation and success of the annual training week has diminished the need for on-shift training, thus weakening the argument in favor of the overlap provided by 4/10 for such training opportunities.

MORALE

We come now to the single biggest defect of the 5/8's plan: It is no where near as popular with the employees as the current 4/10's. Although there is not universal disagreement with 5/8's, our 4/10 plan enjoys a deep popularity. To lose it would have an equally profound effect on morale -- especially when the loss is for things as administratively oriented as financial and staffing needs, and especially since it disrupts something as fundamental as one's work week. Contemplating such a change should not be taken lightly -- and in considering my recommendations, I did not.

It must be stated, too, that the impact of converting to 5/8's for the officers is not just the loss of the three day weekend. I have to imagine that such things as fewer calls per shift (both because the shift is shorter, and the workload spread out over more people), significantly better access to annual leave, closer backup during high risk calls, more leisure time available in the "evenings" after work, fewer disrupted lunch breaks, and the satisfaction of knowing that more of one's reports might be investigated instead of merely and automatically suspended has to have some positive impact on employee morale.

CONCLUSIONS

When all the dust settles, there is really little dispute with the "paper value" of 5/8's -- it will cost less, there will be more people, and it will restore many services. Period.

It seems like that should make the decision easy. It doesn't.

The popularity of 4/10's has, sadly, pitted the desires of the officers of the Anchorage Police Department to maintain their three day weekends against the desires of the public for an efficient police department. In fact, 4/10's are so jealously guarded by the officers that reduced officer safety (from insufficient units) seems an acceptable consequence for having such a long weekend.

The public doesn't seem to have anything against 4/10's per se, but the net result of its costing more money while providing less service places this administration in the unenviable position of having to recognize this on behalf of the public, and then discharge a very disagreeable duty.

It is, however, a chore whose time has come.