Fire-Personnel

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THE UNIVERSITY OF TENNESSEE MUNICIPAL TECHNICAL ADVISORY SERVICE



December 15, 1999

Billy S. Hobbs, Mayor City of White House P. O. Box 69 White House, Tennessee 37188 223 Sixth Avenue North Nashville, Tennessee 37219 Phone: (615) 532-6827 Fax: (615) 532-4963

Dear Mayor Hobbs: Recommendations for firefighter schedules for white House, Tennessee / [Ray crouch] Thank you for asking MTAS to advise you on shift schedules and staffing levels for your

Thank you for asking MTAS to advise you on shift schedules and staffing levels for your fire department. I have enclosed a firefighter schedule that shows the type of schedule that I recommended when we met with Chief Palmer in your office. I understand that Chief Palmer has already implemented this schedule based on our meeting.

The other issues that we discussed, were an additional fire station and staffing. I congratulate you that you have already proceeded to acquire the land for the second fire station. To be effective, both with costs and operations, I would suggest that you use some non-traditional staffing methods.

For your second station, I would recommend that you hire 5 additional full-time firefighters. Three of these would work the traditional 24 / 48 shift pattern that your current full-time firefighters are working. (The attached schedule.) The other two firefighters would work a semi-traditional day shift with one of these two firefighters working from 7:00 am to 6:30 pm on Sunday, Monday, Tuesday and from 7:00 am to 12:30 pm on Wednesday. The second daytime firefighter would work from 12:30 pm until 6:30 pm on Wednesday and from 7:00 am until 6:30 pm on Thursday, Friday, and Saturday. The firefighters would swap shifts every 12 weeks so that the same one would not have to work on Sunday all year long.

A volunteer firefighter would come to this station each day at 6:30 pm and would stay and sleep-over at the station until 7:00 am the next morning. This arrangement would keep two firefighters at the station at all times.

If you have 30 volunteer firefighters, which you should have, this would mean that each volunteer must sleep at the station only one night pe month. Volunteer firefighter recruiting is absolutely essential. The best way to do this, is to have the full-time firefighter run a fire explorer post in the local high school. This sounds simple, but it takes time, and a lot of hard work. But, if done right, will solve your volunteer firefighter recruiting problems. I will be happy to work with you further to set up this or any other program that you need.

If you do not concentrate on the volunteer program, you will have to hire more full-time paid firefighters. A combination of paid and volunteer firefighters is the most cost effective method to operate your fire department.

ibrar Re: Fire

Sincerely yours Crouch. Sr. Ray

Fire Department Management Consultant

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Fire Department - 3 platoon system - 24 / 48 shift pattern - 28 day schedule Working straight 24 hour shift with no sleep-time deductions and one kelly day every third 28 day cycle.

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
<u>Day 1</u>	<u>Day 2</u>	<u>Day 3</u>	<u>Day 4</u>	<u>Day 5</u>	<u>Day 6</u>	<u>Day 7</u>
<u>A - shift(1)</u>	<u>B - shift(1)</u>	<u>C -shift(1)</u>	<u>A - shift(2)</u>	<u>B - shift(2)</u>	<u>C - shift(2)</u>	<u>A - shift(3)</u>
7am-7am	7am-7am	7am-7am	7am-7am	7am-7am	7am-7am	7am-7am
24 Hrs.	24 Hrs.	24 Hrs.	24 Hrs.	24 Hrs.	24 Hrs.	24 Hrs.
<u>Day 8</u>	<u>Day 9</u>	<u>Day 10</u>	<u>Day 11</u>	<u>Day 12</u>	<u>Day 13</u>	<u>Day 14</u>
<u>B - shift(3)</u>	<u>C - shift(3)</u>	<u>A - shift(4)</u>	<u>B - shift(4)</u>	<u>C - shift(4)</u>	<u>A - shift(5)</u>	<u>B - shift(5)</u>
7am-7am	7am-7am	7am-7am	7am-7am	7am-7am	7am-7am	7am-7am
24 Hrs.	24 Hrs.	24 Hrs.	24 Hrs.	24 Hrs.	24 Hrs.	24 Hrs.
<u>Day 15</u>	<u>Day 16</u>	<u>Day 17</u>	<u>Day 18</u>	<u>Day 19</u>	<u>Day 20</u>	<u>Day 21</u>
<u>C - shift(5)</u>	<u>A - shift(6)</u>	<u>B - shift(6)</u>	<u>C - shift(6)</u>	<u>A - shift(7)</u>	<u>B - shift(7)</u>	<u>C - shift(7)</u>
7am-7am	7am-7am	7am-7am	7am-7am	7am-7am	7am-7am	7am-7am
24 Hrs.	24 Hrs.	24 Hrs.	24 Hrs.	24 Hrs.	24 Hrs.	24 Hrs.
<u>Day 22</u> <u>A - shift(8)</u> 7am-7am 24 Hrs.	Day 23 <u>B - shift(8)</u> 7am-7am 24 Hrs.	<u>Day 24</u> <u>C - shift(8)</u> 7am-7am 24 Hrs.	<u>Day 25</u> <u>A - shift(9)</u> 7am-7am 24 Hrs.	Day 26 <u>B - shift(9)</u> 7am-7am 24 Hrs.	<u>Day 27</u> <u>C - shift(9)</u> 7am-7am 24 Hrs.	Day 28 <u>A - shift(10)</u> Kelly-day Part-time firefighter works

First 28 day cycle:

Definitions:

Shift - One 24 hour period.

Kelly-Day - One scheduled 24 hour shift off to avoid overtime.

A shift: (Red)	10 shifts minus one kelly day equals 9 shifts, $9 \ge 24$ hrs. = 216 scheduled hrs.(This is 4 hours of overtime if the firefighter does not take any other leave during the work period.)
B shift: (Blue)	9 shifts x 24 hrs. = 216 scheduled hours. (This is 4 hours of overtime if the firefighter does not take any other leave during the work period.)
C shift: (Green)	9 shifts x 24 hrs. = 216 scheduled hours. (This is 4 hours of overtime if the firefighter does not take any other leave during the work period.)

Fire Department - 3 platoon system - 24 / 48 shift pattern - 28 day schedule working straight 24 hour shift with no sleep-time deductions and one kelly day every third 28 day cycle. (Continued)

Second 28 day cycle:

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
<u>Day 1</u>	<u>Day 2</u>	<u>Day 3</u>	Day 4	<u>Day 5</u>	<u>Day 6</u>	<u>Day 7</u>
<u>B - shift(1)</u>	<u>C - shift(1)</u>	<u>A -shift(1)</u>	B - shift(2)	<u>C - shift(2)</u>	<u>A - shift(2)</u>	<u>B - shift(3)</u>
7am-7am	7am-7am	7am-7am	7am-7am	7am-7am	7am-7am	7am-7am
24 Hrs.	24 Hrs.	24 Hrs.	24 Hrs.	24 Hrs.	24 Hrs.	24 Hrs.
<u>Day 8</u>	<u>Day 9</u>	<u>Day 10</u>	<u>Day 11</u>	<u>Day 12</u>	<u>Day 13</u>	<u>Day 14</u>
<u>C - shift(3)</u>	<u>A - shift(3)</u>	<u>B - shift(4)</u>	<u>C - shift(4)</u>	<u>A - shift(4)</u>	<u>B - shift(5)</u>	<u>C - shift(5)</u>
7am-7am	7am-7am	7am-7am	7am-7am	7am-7am	7am-7am	7am-7am
24 Hrs.	24 Hrs.	24 Hrs.	24 Hrs.	24 Hrs.	24 Hrs.	24 Hrs.
Day 15	<u>Day 16</u>	<u>Day 17</u>	<u>Day 18</u>	<u>Day 19</u>	<u>Day 20</u>	<u>Day 21</u>
<u>A - shift(5)</u>	<u>B - shift(6)</u>	<u>C - shift(6)</u>	<u>A - shift(6)</u>	<u>B - shift(7)</u>	<u>C - shift(7)</u>	<u>A - shift(7)</u>
7am-7am	7am-7am	7am-7am	7am-7am	7am-7am	7am-7am	7am-7am
24 Hrs.	24 Hrs.	24 Hrs.	24 Hrs.	24 Hrs.	24 Hrs.	24 Hrs.
Day 22 <u>B - shift(8)</u> 7am-7am 24 Hrs.	<u>Day 23</u> <u>C - shift(8)</u> 7am-7am 24 Hrs.	<u>Day 24</u> <u>A - shift(8)</u> 7am-7am 24 Hrs.	<u>Day 25</u> <u>B - shift(9)</u> 7am-7am 24 Hrs.	<u>Day 26</u> <u>C - shift(9)</u> 7am-7am 24 Hrs.	<u>Day 27</u> <u>A - shift(9)</u> 7am-7am 24 Hrs.	Day 28 B - shift(10) Kelly-day Part-time firefighter works

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B shift: (Blue)	10 shifts minus one kelly day equals 9 shifts, $9 \ge 24$ hrs. = 216 scheduled hrs.(This is 4 hours of overtime if the firefighter does not take any other leave during the work period.)
C shift: (Green)	9 shifts x 24 hrs. = 216 scheduled hours. (This is 4 hours of overtime if the firefighter does not take any other leave during the work period.)
A shift: (Red)	9 shifts x 24 hrs. = 216 scheduled hours. (This is 4 hours of overtime if the firefighter does not take any other leave during the work period.)

Fire Department - 3 platoon system - 24 / 48 shift pattern - 28 day schedule working straight 24 hour shift with no sleep-time deductions and one kelly day every third 28 day cycle. (Continued)

Third 28 day cycle:

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
<u>Day 1</u>	<u>Day 2</u>	<u>Day 3</u>	<u>Day 4</u>	<u>Day 5</u>	<u>Day 6</u>	<u>Day 7</u>
<u>C - shift(1)</u>	<u>A - shift(1)</u>	<u>B -shift(1)</u>	<u>C - shift(2)</u>	<u>A - shift(2)</u>	<u>B - shift(2)</u>	<u>C - shift(3)</u>
7am-7am						
24 Hrs.						
<u>Day 8</u>	<u>Day 9</u>	<u>Day 10</u>	<u>Day 11</u>	<u>Day 12</u>	<u>Day 13</u>	<u>Day 14</u>
<u>A - shift(3)</u>	<u>B - shift(3)</u>	<u>C - shift(4)</u>	<u>A - shift(4)</u>	<u>B - shift(4)</u>	<u>C - shift(5)</u>	<u>A - shift(5)</u>
7am-7am						
24 Hrs.						
Day 15	<u>Day 16</u>	<u>Day 17</u>	Day 18	<u>Day 19</u>	<u>Day 20</u>	<u>Day 21</u>
<u>B - shift(5)</u>	<u>C - shift(6)</u>	<u>A - shift(6)</u>	<u>B - shift(6)</u>	<u>C - shift(7)</u>	<u>A - shift(7)</u>	<u>B - shift(7)</u>
7am-7am						
24 Hrs.						
<u>Day 22</u> <u>C - shift(8)</u> 7am-7am 24 Hrs.	<u>Day 23</u> <u>A - shift(8)</u> 7am-7am 24 Hrs.	<u>Day 24</u> <u>B - shift(8)</u> 7am-7am 24 Hrs.	<u>Day 25</u> <u>C - shift(9)</u> 7am-7am 24 Hrs.	<u>Day 26</u> <u>A - shift(9)</u> 7am-7am 24 Hrs.	<u>Day 27</u> <u>B - shift(9)</u> 7am-7am 24 Hrs.	Day 28 <u>C - shift(10)</u> Kelly-day Part-time firefighter works

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- C shift: (Green) 10 shifts minus one kelly day equals 9 shifts, 9×24 hrs. = 216 scheduled hrs.(This is 4 hours of overtime if the firefighter does not take any other leave during the work period.)
- A shift: (Red) 9 shifts x 24 hrs. = 216 scheduled hours. (This is 4 hours of overtime if the firefighter does not take any other leave during the work period.)
- **B shift:** (Blue) 9 shifts x 24 hrs. = 216 scheduled hours. (This is 4 hours of overtime if the firefighter does not take any other leave during the work period.)