



กรมช่างอากาศยาน  
Directorate Of Aeronautical Engineering

# *RTAF AIRCRAFT MAINTENANCE*

## *MAN POWER ANALYSIS*

### *Test & Tutorial*

เป็นองค์กรที่มุ่งเน้นการพัฒนากระบวนการซ่อมสร้างอากาศยาน ให้มีความปลอดภัยและเป็นมาตรฐานสากล





# MAN POWER ANALYSIS (13 ข้อ)

กรมช่างอากาศยาน  
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- a. 48,540 man hours
  - b. 45,540 man hours
  - c. 43,640 man hours
  - d. 44,640 man hours
7. What is the number of optimum man power for G Level maintenance (column H) ?
- a. 44,640 / 1,446
  - b. 43,640 / 1,446
  - c. 45,540 / 1,446
  - d. 48,540 / 1,446
8. How many man hours are required for 300 Hours Inspection within 1 year (column I) ?
- a. 16,000 man hours
  - b. 18,000 man hours
  - c. 15,000 man hours
  - d. 16,500 man hours
9. How many man hours are required for additional work inspection within 1 year (column J) ?
- a. 10,000 man hours
  - b. 12,000 man hours
  - c. 13,000 man hours
  - d. 14,000 man hours
10. How many man hours are required for additional work inspection within 1 year (column J) ?
- a. 10,000 man hours
  - b. 12,000 man hours
  - c. 13,000 man hours

- d. 14,000 man hours
11. How many man hours are required for backshop within 1 year (column K) ?
- a. 5,000 man hours
  - b. 6,000 man hours
  - c. 7,000 man hours
  - d. 8,000 man hours
12. How many man hours are required for Support Equipment (SE) and Aerospace Ground Equipment (AGE) maintenance within 1 year (column L) ?
- a. 5,000 man hours
  - b. 6,000 man hours
  - c. 7,000 man hours
  - d. 8,000 man hours
13. How many man hours are required for I Level maintenance within 1 year (column M) ?
- a. 46,000 man hours
  - b. 46,500 man hours
  - c. 45,000 man hours
  - d. 45,500 man hours
14. What is the number of optimum man power for I Level maintenance (column U) ?
- a. 46,000 / 1,446
  - b. 46,500 / 1,446
  - c. 45,000 / 1,446
  - d. 45,500 / 1,446
- .....

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## Given Data

### แบบทดสอบ MAN POWER ANALYSIS

1. Given: A TFS (Tactical Fighter Squadron) has 15 aircraft in commissioned with a utilization rate of 3,000 flying hours per year and average flight duration of 1 flying hour per landing. The aircraft maintenance program is as follows:

#### Organization Level:

- a. Preflight; EOR (End of Runway) Check; Post flight to be performed before each flight, EOR and after the last flight of the day respectively.
- b. 100 Hours Inspection: to be performed at every 100 flying hours (+ 10 % escalation where necessary).

#### Intermediate Level:

- a. 300 Hours Inspection: to be performed at every 300 flying hours (+ 10 % escalation where necessary). The 300 Hours Insp. shall include 100 Hours Insp. tasks.

The aircraft maintenance matrix is shown in the figure below. The Break Rate (B/R) is 20 %. Data related to crew size, elapsed time and man hours are also shown.

# Given Data

| INSP \ HRS      | HRS  |     |     |     |     |     |     |     |     |                                  |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | CREW SIZE | ELAPSED TIME | TOTAL MH / INSP | NO. OF INSP / YR | TOTAL MH / YR |  |
|-----------------|--|-----|-----|-----|-----|-----|-----|-----|-----|----------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----------|--------------|-----------------|------------------|---------------|--|
|                 | 100  | 200 | 300 | 400 | 500 | 600 | 700 | 800 | 900 | 1000                             | 1100 | 1200 | 1300 | 1400 | 1500 | 1600 | 1700 | 1800 | 1900 | 2000 | 2100 | 2200 | 2300 | 2400 | 2500 | 2600 | 2700 | 2800 | 2900 | 3000 |           |              |                 |                  |               |  |
| O - LEVEL       |  |     |     |     |     |     |     |     |     |                                  |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |              |                 |                  |               |  |
| PREFLIGHT       |  |     |     |     |     |     |     |     |     |                                  |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 3         | 1            | 3               | 3,000            | A             |  |
| EOR             |  |     |     |     |     |     |     |     |     |                                  |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 2         | 0.1          | 0.2             | 3,000            | B             |  |
| POSTFLIGHT      |  |     |     |     |     |     |     |     |     |                                  |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 4         | 1            | 4               | 3,000            | C             |  |
| 100 (O - LEVEL) | 1  | 2   |     | 3   | 4   |     | 5   | 6   |     | 7                                | 8    |      | 9    | 10   |      | 11   | 12   |      | 13   | 14   |      | 15   | 16   |      | 17   | 18   |      | 19   | 20   | 8    | 24        | 192          | 20              | D                |               |  |
| UNSCHED         | BREAK RATE 20 % = (3,000 * 20/100) = 600 UNSCHED; CREW SIZE = 4; ELAPSED TIME = 8 HRS; TOTAL MH / UNSCHED = 32 |     |     |     |     |     |     |     |     |                                  |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 4         | 8            | 32              | 600              | E             |  |
|                 |  |     |     |     |     |     |     |     |     | O - LEVEL TOTAL MAN HOURS / YEAR |      |      |      | F    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |              |                 |                  |               |  |
|                 |  |     |     |     |     |     |     |     |     | 1 MAN YEAR = 1,446 MAN HOURS     |      |      |      | G    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |              |                 |                  |               |  |
|                 |  |     |     |     |     |     |     |     |     | OPTIMUM MAN POWER FOR O - LEVEL  |      |      |      | H    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |              |                 |                  |               |  |
| I - LEVEL       |  |     |     |     |     |     |     |     |     |                                  |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |              |                 |                  |               |  |
| 300 (I - LEVEL) |  |     |     |     |     |     |     |     |     |                                  |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 18        | 100          | 1,800           | 10               | I             |  |
| ADDITIONAL WORK | ADD WORK = 1,200 MH / INSP   |     |     |     |     |     |     |     |     |                                  |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |              | 1,200           | 10               | J             |  |
| BACKSHOP        | BACK SHOP = 800 MH / INSP  |     |     |     |     |     |     |     |     |                                  |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |              | 800             | 10               | K             |  |
| SE & AGE MAINT. | SUPPORT EQUIPMENT & AGE MAINTENANCE = 8,000 MH / YEAR  |     |     |     |     |     |     |     |     |                                  |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |              |                 |                  | L             |  |
|                 |  |     |     |     |     |     |     |     |     | I - LEVEL TOTAL MAN HOURS / YEAR |      |      |      | M    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |              |                 |                  |               |  |
|                 |  |     |     |     |     |     |     |     |     | 1 MAN YEAR = 1,446 MAN HOURS     |      |      |      | N    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |              |                 |                  |               |  |
|                 |  |     |     |     |     |     |     |     |     | OPTIMUM MAN POWER FOR O - LEVEL  |      |      |      | O    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |           |              |                 |                  |               |  |

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1

How many man hours are required for Preflight Inspection within 1 year (column A) ?

- a. 3,000 man hours
- b. 6,000 man hours

- c. 8,000 man hours
- d. 9,000 man hours

| INSP \ HRS      | 100  | 200 | 300 | 400 | 500 | 600 | 700 | 800 | 900 | 1000 | 1100 | 1200 | 1300 | 1400 | 1500 | 1600 | 1700 | 1800 | 1900 | 2000 | 2100 | 2200 | 2300 | 2400 | 2500 | 2600 | 2700 | 2800 | 2900 | 3000                             | CREW SIZE | ELAPSED TIME | TOTAL MH / INSP | NO. OF INSP / YR | TOTAL MH / YR |   |
|-----------------|--|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|----------------------------------|-----------|--------------|-----------------|------------------|---------------|---|
| O - LEVEL       |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                  |           |              |                 |                  |               |   |
| PREFLIGHT       |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                  |           | 3            | 1               | 3                | 3,000         | A |
| EOR             |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                  |           | 2            | 0.1             | 0.2              | 3,000         | B |
| POSTFLIGHT      |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                  |           | 4            | 1               | 4                | 3,000         | C |
| 100 (O - LEVEL) | 1  | 2   |     | 3   | 4   |     | 5   | 6   |     | 7    | 8    |      | 9    | 10   |      | 11   | 12   |      | 13   | 14   |      | 15   | 16   |      | 17   | 18   |      | 19   | 20   | 8                                | 24        | 192          | 20              | D                |               |   |
| UNSCHED         | BREAK RATE 20 % = (3,000 * 20/100) = 600 UNSCHED; CREW SIZE = 4; ELAPSED TIME = 8 HRS; TOTAL MH / UNSCHED = 32 |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                  | 4         | 8            | 32              | 600              | E             |   |
|                 |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | O - LEVEL TOTAL MAN HOURS / YEAR |           |              | F               |                  |               |   |
|                 |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 1 MAN YEAR = 1,446 MAN HOURS     |           |              | G               |                  |               |   |
|                 |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | OPTIMUM MAN POWER FOR O - LEVEL  |           |              | H               |                  |               |   |
| I - LEVEL       |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                  |           |              |                 |                  |               |   |
| 300 (I - LEVEL) |  |     | 1   |     |     | 2   |     |     |     | 3    |      |      |      | 4    |      |      |      |      | 5    |      |      |      |      |      |      |      |      |      |      |                                  |           | 18           | 100             | 1,800            | 10            | I |
| ADDITIONAL WORK | ADD WORK = 1,200 MH / INSP   |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                  |           |              | 1,200           | 10               | J             |   |
| BACKSHOP        | BACK SHOP = 800 MH / INSP  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                  |           |              | 800             | 10               | K             |   |
| SE & AGE MAINT. | SUPPORT EQUIPMENT & AGE MAINTENANCE = 8,000 MH / YEAR  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                  |           |              |                 |                  | L             |   |
|                 |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | I - LEVEL TOTAL MAN HOURS / YEAR |           |              | M               |                  |               |   |
|                 |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 1 MAN YEAR = 1,446 MAN HOURS     |           |              | N               |                  |               |   |
|                 |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | OPTIMUM MAN POWER FOR O - LEVEL  |           |              | O               |                  |               |   |

PREFLIGHT INSP ต้องการ Man Hours = 3 ชม.คน / INSP      WORKLOAD PREFLIGHT : 3,000 ครั้ง / ปี

PREFLIGHT INSP (TOTAL Man Hours/Year) = 3,000 x 3 = 9,000 Man Hours

2

. How many man hours are required for EOR Inspection within 1 year (column B) ?

- a. 600 man hours
- b. 300 man hours

- c. 900 man hours
- d. 1,200 man hours

| INSP \ HRS      | 100  | 200 | 300 | 400 | 500 | 600 | 700 | 800 | 900 | 1000 | 1100 | 1200 | 1300 | 1400 | 1500 | 1600 | 1700 | 1800 | 1900 | 2000 | 2100 | 2200 | 2300 | 2400 | 2500 | 2600 | 2700 | 2800 | 2900 | 3000                             | CREW SIZE | ELAPSED TIME | TOTAL MH / INSP | NO. OF INSP / YR | TOTAL MH / YR |   |
|-----------------|--|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|----------------------------------|-----------|--------------|-----------------|------------------|---------------|---|
| O - LEVEL       |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                  |           |              |                 |                  |               |   |
| PREFLIGHT       |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                  |           | 3            | 1               | 3                | 3,000         | A |
| EOR             |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                  |           | 2            | 0.1             | 0.2              | 3,000         | B |
| POSTFLIGHT      |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                  |           | 4            | 1               | 4                | 3,000         | C |
| 100 (O - LEVEL) | 1  | 2   |     | 3   | 4   |     | 5   | 6   |     | 7    | 8    |      | 9    | 10   |      | 11   | 12   |      | 13   | 14   |      | 15   | 16   |      | 17   | 18   |      | 19   | 20   | 8                                | 24        | 192          | 20              | D                |               |   |
| UNSCHED         | BREAK RATE 20 % = (3,000 * 20/100) = 600 UNSCHED; CREW SIZE = 4; ELAPSED TIME = 8 HRS; TOTAL MH / UNSCHED = 32 |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                  | 4         | 8            | 32              | 600              | E             |   |
|                 |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | O - LEVEL TOTAL MAN HOURS / YEAR |           |              | F               |                  |               |   |
|                 |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 1 MAN YEAR = 1,446 MAN HOURS     |           |              | G               |                  |               |   |
|                 |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | OPTIMUM MAN POWER FOR O - LEVEL  |           |              | H               |                  |               |   |
| I - LEVEL       |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                  |           |              |                 |                  |               |   |
| 300 (I - LEVEL) |  |     | 1   |     |     | 2   |     |     | 3   |      |      | 4    |      |      | 5    |      |      | 6    |      |      | 7    |      |      | 8    |      |      | 9    |      |      | 10                               | 18        | 100          | 1,800           | 10               | I             |   |
| ADDITIONAL WORK | ADD WORK = 1,200 MH / INSP   |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                  |           |              | 1,200           | 10               | J             |   |
| BACKSHOP        | BACK SHOP = 800 MH / INSP  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                  |           |              | 800             | 10               | K             |   |
| SE & AGE MAINT. | SUPPORT EQUIPMENT & AGE MAINTENANCE = 8,000 MH / YEAR  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                  |           |              |                 |                  | L             |   |
|                 |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | I - LEVEL TOTAL MAN HOURS / YEAR |           |              | M               |                  |               |   |
|                 |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 1 MAN YEAR = 1,446 MAN HOURS     |           |              | N               |                  |               |   |
|                 |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | OPTIMUM MAN POWER FOR O - LEVEL  |           |              | O               |                  |               |   |

EOR INSP ต้องการ Man Hours = 0.2 ชม.คน / INSP      WORKLOAD EOR : 3,000 ครั้ง / ปี

EOR INSP (TOTAL Man Hours/Year) = 3,000 x 0.2 = 600 Man Hours

3 How many man hours are required for Post flight Inspection within 1 year (column C) ?

- a. 10,000 man hours
- b. 12,000 man hours

- c. 14,000 man hours
- d. 16,000 man hours

| INSP \ HRS       | 100  | 200 | 300 | 400 | 500 | 600 | 700 | 800 | 900 | 1000 | 1100 | 1200 | 1300 | 1400 | 1500 | 1600 | 1700 | 1800 | 1900 | 2000 | 2100 | 2200 | 2300 | 2400 | 2500 | 2600 | 2700 | 2800 | 2900 | 3000                             | CREW SIZE | ELAPSED TIME | TOTAL MH / INSP | NO. OF INSP / YR | TOTAL MH / YR |   |
|------------------|--|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|----------------------------------|-----------|--------------|-----------------|------------------|---------------|---|
| <b>O - LEVEL</b> |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                  |           |              |                 |                  |               |   |
| PREFLIGHT        |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                  |           | 3            | 1               | 3                | 3,000         | A |
| EOR              |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                  |           | 2            | 0.1             | 0.2              | 3,000         | B |
| POSTFLIGHT       |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                  |           | 4            | 1               | 4                | 3,000         | C |
| 100 (O - LEVEL)  | 1  | 2   | 3   | 4   | 5   | 6   | 7   | 8   | 9   | 10   | 11   | 12   | 13   | 14   | 15   | 16   | 17   | 18   | 19   | 20   |      |      |      |      |      |      |      |      |      |                                  | 8         | 24           | 192             | 3,000            | D             |   |
| UNSCHED          | BREAK RATE 20 % = (3,000 * 20/100) = 600 UNSCHED; CREW SIZE = 4; ELAPSED TIME = 8 HRS; TOTAL MH / UNSCHED = 32 |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                  | 4         | 8            | 32              | 600              | E             |   |
|                  |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | O - LEVEL TOTAL MAN HOURS / YEAR |           |              | F               |                  |               |   |
|                  |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 1 MAN YEAR = 1,446 MAN HOURS     |           |              | G               |                  |               |   |
|                  |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | OPTIMUM MAN POWER FOR O - LEVEL  |           |              | H               |                  |               |   |
| <b>I - LEVEL</b> |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                  |           |              |                 |                  |               |   |
| 300 (I - LEVEL)  |  | 1   |     | 2   |     | 3   |     | 4   |     | 5    |      | 6    |      | 7    |      | 8    |      | 9    |      | 10   |      |      |      |      |      |      |      |      |      |                                  | 18        | 100          | 1,800           | 10               | I             |   |
| ADDITIONAL WORK  | ADD WORK = 1,200 MH / INSP   |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                  |           |              | 1,200           | 10               | J             |   |
| BACKSHOP         | BACK SHOP = 800 MH / INSP  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                  |           |              | 800             | 10               | K             |   |
| SE & AGE MAINT.  | SUPPORT EQUIPMENT & AGE MAINTENANCE = 8,000 MH / YEAR  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                  |           |              |                 |                  | L             |   |
|                  |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | I - LEVEL TOTAL MAN HOURS / YEAR |           |              | M               |                  |               |   |
|                  |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 1 MAN YEAR = 1,446 MAN HOURS     |           |              | N               |                  |               |   |
|                  |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | OPTIMUM MAN POWER FOR O - LEVEL  |           |              | O               |                  |               |   |

POSTFLIGHT ต้องการ Man Hours = 4 ชม.คน / INSP      WORKLOAD POSTFLIGHT : 3,000 ครั้ง / ปี

POSTFLIGHT INSP (TOTAL Man Hours/Year) = 3,000 x 4 = 12,000 Man Hours



4 How many man hours are required for 100 Hours Inspection within 1 year (column D) ?

- a. 3,000 man hours
- b. 3,600 man hours

- c. 3,840 man hours
- d. 3,900 man hours

| INSP \ HRS      | 100  | 200 | 300 | 400 | 500 | 600 | 700 | 800 | 900 | 1000 | 1100 | 1200 | 1300 | 1400 | 1500 | 1600 | 1700 | 1800 | 1900 | 2000 | 2100 | 2200 | 2300  | 2400 | 2500 | 2600 | 2700 | 2800 | 2900 | 3000                             | CREW SIZE | ELAPSED TIME | TOTAL MH / INSP | NO. OF INSP / YR | TOTAL MH / YR |   |
|-----------------|--|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|------|------|------|------|------|------|----------------------------------|-----------|--------------|-----------------|------------------|---------------|---|
| O - LEVEL       |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |      |      |                                  |           |              |                 |                  |               |   |
| PREFLIGHT       |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |      |      |                                  |           | 3            | 1               | 3                | 3,000         | A |
| EOR             |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |      |      |                                  |           | 2            | 0.1             | 0.2              | 3,000         | B |
| POSTFLIGHT      |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |      |      |                                  |           | 4            | 1               | 4                | 3,000         | C |
| 100 (O - LEVEL) | 1  | 2   | 3   | 4   | 5   | 6   | 7   | 8   | 9   | 10   | 11   | 12   | 13   | 14   | 15   | 16   | 17   | 18   | 19   | 20   | 8    | 24   | 192   | 20   | D    |      |      |      |      |                                  |           |              |                 |                  |               |   |
| UNSCHED         | BREAK RATE 20 % = (3,000 * 20/100) = 600 UNSCHED; CREW SIZE = 4; ELAPSED TIME = 8 HRS; TOTAL MH / UNSCHED = 32 |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |      |      |                                  | 4         | 8            | 32              | 600              | E             |   |
|                 |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |      |      | O - LEVEL TOTAL MAN HOURS / YEAR |           |              | F               |                  |               |   |
|                 |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |      |      | 1 MAN YEAR = 1,446 MAN HOURS     |           |              | G               |                  |               |   |
|                 |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |      |      | OPTIMUM MAN POWER FOR O - LEVEL  |           |              | H               |                  |               |   |
| I - LEVEL       |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |      |      |                                  |           |              |                 |                  |               |   |
| 300 (I - LEVEL) |  | 1   |     | 2   |     | 3   |     | 4   |     | 5    |      | 6    |      | 7    |      | 8    |      | 9    |      | 10   | 18   | 100  | 1,800 | 10   | I    |      |      |      |      |                                  |           |              |                 |                  |               |   |
| ADDITIONAL WORK | ADD WORK = 1,200 MH / INSP   |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |      |      |                                  |           |              | 1,200           | 10               | J             |   |
| BACKSHOP        | BACK SHOP = 800 MH / INSP  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |      |      |                                  |           |              | 800             | 10               | K             |   |
| SE & AGE MAINT. | SUPPORT EQUIPMENT & AGE MAINTENANCE = 8,000 MH / YEAR  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |      |      |                                  |           |              |                 |                  | L             |   |
|                 |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |      |      | I - LEVEL TOTAL MAN HOURS / YEAR |           |              | M               |                  |               |   |
|                 |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |      |      | 1 MAN YEAR = 1,446 MAN HOURS     |           |              | N               |                  |               |   |
|                 |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |      |      |      |      |      | OPTIMUM MAN POWER FOR O - LEVEL  |           |              | O               |                  |               |   |

100 HOURS INSP ต้องการ Man Hours = 192 ชม.คน / INSP    WORKLOAD 100 HOURS INSP : 20 ครั้ง / ปี

100 HOURS INSP (TOTAL Man Hours/Year) = 192 x 20 = 3,840 Man Hours

5 How many man hours are required for unscheduled maintenance within 1 year (column E) ?

- a. 18,200 man hours
- b. 19,000 man hours

- c. 19,200 man hours
- d. 20,200 man hours

| INSP \ HRS      | 100  | 200 | 300 | 400 | 500 | 600 | 700 | 800 | 900 | 1000 | 1100 | 1200 | 1300 | 1400 | 1500 | 1600 | 1700 | 1800 | 1900 | 2000                             | 2100 | 2200 | 2300  | 2400 | 2500 | 2600 | 2700 | 2800 | 2900 | 3000 | CREW SIZE | ELAPSED TIME | TOTAL MH / INSP | NO. OF INSP / YR | TOTAL MH / YR |   |
|-----------------|--|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|------|------|------|----------------------------------|------|------|-------|------|------|------|------|------|------|------|-----------|--------------|-----------------|------------------|---------------|---|
| O - LEVEL       |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |                                  |      |      |       |      |      |      |      |      |      |      |           |              |                 |                  |               |   |
| PREFLIGHT       |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |                                  |      |      |       |      |      |      |      |      |      |      |           | 3            | 1               | 3                | 3,000         | A |
| EOR             |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |                                  |      |      |       |      |      |      |      |      |      |      |           | 2            | 0.1             | 0.2              | 3,000         | B |
| POSTFLIGHT      |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |                                  |      |      |       |      |      |      |      |      |      |      |           | 4            | 1               | 4                | 3,000         | C |
| 100 (O - LEVEL) | 1  | 2   | 3   | 4   | 5   | 6   | 7   | 8   | 9   | 10   | 11   | 12   | 13   | 14   | 15   | 16   | 17   | 18   | 19   | 20                               |      |      |       |      |      |      |      |      |      |      | 8         | 24           | 192             | 20               | D             |   |
| UNSCHED         | BREAK RATE 20 % = (3,000 * 20/100) = 600 UNSCHED; CREW SIZE = 4; ELAPSED TIME = 8 HRS; TOTAL MH / UNSCHED = 32 |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |                                  | 4    | 8    | 32    | 600  | E    |      |      |      |      |      |           |              |                 |                  |               |   |
|                 |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      | O - LEVEL TOTAL MAN HOURS / YEAR |      |      |       |      |      |      |      |      |      |      |           |              |                 |                  |               |   |
|                 |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      | 1 MAN YEAR = 1,446 MAN HOURS     |      |      | G     |      |      |      |      |      |      |      |           |              |                 |                  |               |   |
|                 |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      | OPTIMUM MAN POWER FOR O - LEVEL  |      |      | H     |      |      |      |      |      |      |      |           |              |                 |                  |               |   |
| I - LEVEL       |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |                                  |      |      |       |      |      |      |      |      |      |      |           |              |                 |                  |               |   |
| 300 (I - LEVEL) |  | 1   |     | 2   |     | 3   |     | 4   |     | 5    |      | 6    |      | 7    |      | 8    |      | 9    |      | 10                               |      |      |       |      |      |      |      |      |      |      | 18        | 100          | 1,800           | 10               | I             |   |
| ADDITIONAL WORK | ADD WORK = 1,200 MH / INSP   |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |                                  |      |      | 1,200 | 10   | J    |      |      |      |      |      |           |              |                 |                  |               |   |
| BACKSHOP        | BACK SHOP = 800 MH / INSP  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |                                  |      |      | 800   | 10   | K    |      |      |      |      |      |           |              |                 |                  |               |   |
| SE & AGE MAINT. | SUPPORT EQUIPMENT & AGE MAINTENANCE = 8,000 MH / YEAR  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |                                  |      |      |       |      | L    |      |      |      |      |      |           |              |                 |                  |               |   |
|                 |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      | I - LEVEL TOTAL MAN HOURS / YEAR |      |      | M     |      |      |      |      |      |      |      |           |              |                 |                  |               |   |
|                 |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      | 1 MAN YEAR = 1,446 MAN HOURS     |      |      | N     |      |      |      |      |      |      |      |           |              |                 |                  |               |   |
|                 |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      | OPTIMUM MAN POWER FOR O - LEVEL  |      |      | O     |      |      |      |      |      |      |      |           |              |                 |                  |               |   |

UNSCHED INSP ต้องการ Man Hours = 32 ชม.คน / INSP      WORKLOAD UNSCHED : 600 ครั้ง / ปี

UNSCHED INSP (TOTAL Man Hours/Year) = 600 x 32 = 19,200 Man Hours



7

What is the number of optimum man power for O – Level maintenance (column H) ?

a. 44,640 / 1,446

c. 45,540 / 1,446

b. 43,640 / 1,446

d. 48,540 / 1,446

| INSP \ HRS      | 100  | 200 | 300 | 400 | 500 | 600 | 700 | 800 | 900 | 1000 | 1100 | 1200 | 1300 | 1400 | 1500 | 1600 | 1700 | 1800 | 1900 | 2000 | 2100 | 2200 | 2300 | 2400 | 2500 | 2600 | 2700 | 2800 | 2900 | 3000                             | CREW SIZE | ELAPSED TIME | TOTAL MH / INSP | NO. OF INSP / YR | TOTAL MH / YR |     |       |       |    |   |
|-----------------|--|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|----------------------------------|-----------|--------------|-----------------|------------------|---------------|-----|-------|-------|----|---|
| O - LEVEL       |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                  |           |              |                 |                  |               |     |       |       |    |   |
| PREFLIGHT       |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                  |           |              |                 | 3                | 1             | 3   | 3,000 | A     |    |   |
| EOR             |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                  |           |              |                 |                  | 2             | 0.1 | 0.2   | 3,000 | B  |   |
| POSTFLIGHT      |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                  |           |              |                 |                  | 4             | 1   | 4     | 3,000 | C  |   |
| 100 (O - LEVEL) | 1  | 2   |     | 3   | 4   |     | 5   | 6   |     | 7    | 8    |      | 9    | 10   |      | 11   | 12   |      | 13   | 14   |      | 15   | 16   |      | 17   | 18   |      | 19   | 20   |                                  |           | 8            | 24              | 192              | 20            | D   |       |       |    |   |
| UNSCHED         | BREAK RATE 20 % = (3,000 * 20/100) = 600 UNSCHED; CREW SIZE = 4; ELAPSED TIME = 8 HRS; TOTAL MH / UNSCHED = 32 |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                  | 4         | 8            | 32              | 600              | E             |     |       |       |    |   |
|                 |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | O - LEVEL TOTAL MAN HOURS / YEAR |           |              |                 | F                |               |     |       |       |    |   |
|                 |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 1 MAN YEAR = 1,446 MAN HOURS     |           |              |                 | G                |               |     |       |       |    |   |
|                 |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | OPTIMUM MAN POWER FOR O - LEVEL  |           |              |                 | H                |               |     |       |       |    |   |
| I - LEVEL       |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                  |           |              |                 |                  |               |     |       |       |    |   |
| 300 (I - LEVEL) |  |     | 1   |     |     | 2   |     |     |     | 3    |      |      |      | 4    |      |      |      |      |      | 5    |      |      |      |      |      |      |      |      |      |                                  |           | 9            |                 |                  |               | 18  | 100   | 1,800 | 10 | I |
| ADDITIONAL WORK | ADD WORK = 1,200 MH / INSP   |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                  |           |              | 1,200           | 10               | J             |     |       |       |    |   |
| BACKSHOP        | BACK SHOP = 800 MH / INSP  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                  |           |              | 800             | 10               | K             |     |       |       |    |   |
| SE & AGE MAINT. | SUPPORT EQUIPMENT & AGE MAINTENANCE = 8,000 MH / YEAR  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                  |           |              |                 |                  | L             |     |       |       |    |   |
|                 |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | I - LEVEL TOTAL MAN HOURS / YEAR |           |              |                 | M                |               |     |       |       |    |   |
|                 |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 1 MAN YEAR = 1,446 MAN HOURS     |           |              |                 | N                |               |     |       |       |    |   |
|                 |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | OPTIMUM MAN POWER FOR O - LEVEL  |           |              |                 | O                |               |     |       |       |    |   |

**Optimum Man Power for O-LEVEL = (O-LEVEL Man Hours/Year) / (1 Man Year)**

**Optimum Man Power for O-LEVEL = (44,640) / (1,446)**

8. How many man hours are required for 300 Hours Inspection within 1 year (column I) ?

- a. 16,000 man hours
- b. 18,000 man hours

- c. 15,000 man hours
- d. 16,500 man hours

| INSP \ HRS      | 100  | 200 | 300 | 400 | 500 | 600 | 700 | 800 | 900 | 1000 | 1100 | 1200 | 1300 | 1400 | 1500 | 1600 | 1700 | 1800 | 1900 | 2000 | 2100 | 2200 | 2300 | 2400 | 2500 | 2600 | 2700 | 2800 | 2900 | 3000                             | CREW SIZE | ELAPSED TIME | TOTAL MH / INSP | NO. OF INSP / YR | TOTAL MH / YR |   |
|-----------------|--|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|----------------------------------|-----------|--------------|-----------------|------------------|---------------|---|
| O - LEVEL       |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                  |           |              |                 |                  |               |   |
| PREFLIGHT       |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                  |           | 3            | 1               | 3                | 3,000         | A |
| EOR             |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                  |           | 2            | 0.1             | 0.2              | 3,000         | B |
| POSTFLIGHT      |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                  |           | 4            | 1               | 4                | 3,000         | C |
| 100 (O - LEVEL) | 1  | 2   | 3   | 4   | 5   | 6   | 7   | 8   | 9   | 10   | 11   | 12   | 13   | 14   | 15   | 16   | 17   | 18   | 19   | 20   |      |      |      |      |      |      |      |      |      |                                  | 8         | 24           | 192             | 20               | D             |   |
| UNSCHED         | BREAK RATE 20 % = (3,000 * 20/100) = 600 UNSCHED; CREW SIZE = 4; ELAPSED TIME = 8 HRS; TOTAL MH / UNSCHED = 32 |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                  | 4         | 8            | 32              | 600              | E             |   |
|                 |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | O - LEVEL TOTAL MAN HOURS / YEAR |           |              | F               |                  |               |   |
|                 |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 1 MAN YEAR = 1,446 MAN HOURS     |           |              | G               |                  |               |   |
|                 |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | OPTIMUM MAN POWER FOR O - LEVEL  |           |              | H               |                  |               |   |
| I - LEVEL       |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                  |           |              |                 |                  |               |   |
| 300 (I - LEVEL) |  | 1   |     | 2   |     | 3   |     | 4   |     | 5    |      | 6    |      | 7    |      | 8    |      | 9    |      | 10   |      |      |      |      |      |      |      |      |      |                                  |           | 18           | 100             | 1,800            | 10            | I |
| ADDITIONAL WORK | ADD WORK = 1,200 MH / INSP   |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                  |           |              | 1,200           | 10               | J             |   |
| BACKSHOP        | BACK SHOP = 800 MH / INSP  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                  |           |              | 800             | 10               | K             |   |
| SE & AGE MAINT. | SUPPORT EQUIPMENT & AGE MAINTENANCE = 8,000 MH / YEAR  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                  |           |              |                 |                  | L             |   |
|                 |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | I - LEVEL TOTAL MAN HOURS / YEAR |           |              | M               |                  |               |   |
|                 |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 1 MAN YEAR = 1,446 MAN HOURS     |           |              | N               |                  |               |   |
|                 |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | OPTIMUM MAN POWER FOR O - LEVEL  |           |              | O               |                  |               |   |

300 HOURS INSP ต้องการ Man Hours = 1,800 ชม.คน / INSP    WORKLOAD 300 HOURS INSP : 10 ครั้ง / ปี

300 HOURS INSP (TOTAL Man Hours/Year) = 1,800 x 10 = 18,000 Man Hours



9. How many man hours are required for additional work Inspection within 1 year (column J) ?

- a. 10,000 man hours
- b. 12,000 man hours

- c. 13,000 man hours
- d. 14,000 man hours

| INSP \ HRS      | 100  | 200 | 300 | 400 | 500 | 600 | 700 | 800 | 900 | 1000 | 1100 | 1200 | 1300 | 1400 | 1500 | 1600 | 1700 | 1800 | 1900 | 2000 | 2100 | 2200 | 2300 | 2400 | 2500 | 2600 | 2700 | 2800 | 2900 | 3000                             | CREW SIZE | ELAPSED TIME | TOTAL MH / INSP | NO. OF INSP / YR | TOTAL MH / YR |   |
|-----------------|--|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|----------------------------------|-----------|--------------|-----------------|------------------|---------------|---|
| O - LEVEL       |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                  |           |              |                 |                  |               |   |
| PREFLIGHT       |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                  |           | 3            | 1               | 3                | 3,000         | A |
| EOR             |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                  |           | 2            | 0.1             | 0.2              | 3,000         | B |
| POSTFLIGHT      |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                  |           | 4            | 1               | 4                | 3,000         | C |
| 100 (O - LEVEL) | 1  | 2   | 3   | 4   | 5   | 6   | 7   | 8   | 9   | 10   | 11   | 12   | 13   | 14   | 15   | 16   | 17   | 18   | 19   | 20   |      |      |      |      |      |      |      |      |      |                                  | 8         | 24           | 192             | 20               | D             |   |
| UNSCHED         | BREAK RATE 20 % = (3,000 * 20/100) = 600 UNSCHED; CREW SIZE = 4; ELAPSED TIME = 8 HRS; TOTAL MH / UNSCHED = 32 |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                  | 4         | 8            | 32              | 600              | E             |   |
|                 |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | O - LEVEL TOTAL MAN HOURS / YEAR |           |              | F               |                  |               |   |
|                 |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 1 MAN YEAR = 1,446 MAN HOURS     |           |              | G               |                  |               |   |
|                 |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | OPTIMUM MAN POWER FOR O - LEVEL  |           |              | H               |                  |               |   |
| I - LEVEL       |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                  |           |              |                 |                  |               |   |
| 300 (I - LEVEL) |  | 1   |     | 2   |     | 3   |     | 4   |     | 5    |      | 6    |      | 7    |      | 8    |      | 9    |      | 10   |      |      |      |      |      |      |      |      |      |                                  |           | 18           | 100             | 1,800            | 10            | I |
| ADDITIONAL WORK | ADD WORK = 1,200 MH / INSP   |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                  |           |              | 1,200           | 10               | J             |   |
| BACKSHOP        | BACK SHOP = 800 MH / INSP  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                  |           |              | 800             | 10               | K             |   |
| SE & AGE MAINT. | SUPPORT EQUIPMENT & AGE MAINTENANCE = 8,000 MH / YEAR  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                  |           |              |                 |                  | L             |   |
|                 |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | I - LEVEL TOTAL MAN HOURS / YEAR |           |              | M               |                  |               |   |
|                 |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 1 MAN YEAR = 1,446 MAN HOURS     |           |              | N               |                  |               |   |
|                 |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | OPTIMUM MAN POWER FOR O - LEVEL  |           |              | O               |                  |               |   |

ADDITION WORK ต้องการ Man Hours = 1,200 ชม.คน / INSP    WORKLOAD ADD WORK : 10 ครั้ง / ปี

ADD WORK (TOTAL Man Hours/Year) = 1,200 x 10 = 12,000 Man Hours

10 How many man hours are required for backshop within 1 year (column K) ?

- a. 5,000 man hours
- b. 6,000 man hours

- c. 7,000 man hours
- d. 8,000 man hours

| INSP \ HRS      | 100  | 200 | 300 | 400 | 500 | 600 | 700 | 800 | 900 | 1000 | 1100 | 1200 | 1300 | 1400 | 1500 | 1600 | 1700 | 1800 | 1900 | 2000 | 2100 | 2200 | 2300 | 2400 | 2500 | 2600 | 2700 | 2800 | 2900 | 3000                             | CREW SIZE | ELAPSED TIME | TOTAL MH / INSP | NO. OF INSP / YR | TOTAL MH / YR |   |
|-----------------|--|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|----------------------------------|-----------|--------------|-----------------|------------------|---------------|---|
| O - LEVEL       |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                  |           |              |                 |                  |               |   |
| PREFLIGHT       |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                  |           | 3            | 1               | 3                | 3,000         | A |
| EOR             |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                  |           | 2            | 0.1             | 0.2              | 3,000         | B |
| POSTFLIGHT      |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                  |           | 4            | 1               | 4                | 3,000         | C |
| 100 (O - LEVEL) | 1  | 2   |     | 3   | 4   |     | 5   | 6   |     | 7    | 8    |      | 9    | 10   |      | 11   | 12   |      | 13   | 14   |      | 15   | 16   |      | 17   | 18   |      | 19   | 20   | 8                                | 24        | 192          | 20              | D                |               |   |
| UNSCHED         | BREAK RATE 20 % = (3,000 * 20/100) = 600 UNSCHED; CREW SIZE = 4; ELAPSED TIME = 8 HRS; TOTAL MH / UNSCHED = 32 |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                  | 4         | 8            | 32              | 600              | E             |   |
|                 |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | O - LEVEL TOTAL MAN HOURS / YEAR |           |              | F               |                  |               |   |
|                 |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 1 MAN YEAR = 1,446 MAN HOURS     |           |              | G               |                  |               |   |
|                 |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | OPTIMUM MAN POWER FOR O - LEVEL  |           |              | H               |                  |               |   |
| I - LEVEL       |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                  |           |              |                 |                  |               |   |
| 300 (I - LEVEL) |  | 1   |     |     | 2   |     |     | 3   |     |      | 4    |      |      | 5    |      |      | 6    |      |      | 7    |      |      | 8    |      |      | 9    |      |      | 10   | 18                               | 100       | 1,800        | 10              | I                |               |   |
| ADDITIONAL WORK | ADD WORK = 1,200 MH / INSP   |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                  |           |              | 1,200           | 10               | J             |   |
| BACKSHOP        | BACK SHOP = 800 MH / INSP  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                  |           |              | 800             | 10               | K             |   |
| SE & AGE MAINT. | SUPPORT EQUIPMENT & AGE MAINTENANCE = 8,000 MH / YEAR  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                  |           |              |                 |                  |               |   |
|                 |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | I - LEVEL TOTAL MAN HOURS / YEAR |           |              | M               |                  |               |   |
|                 |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 1 MAN YEAR = 1,446 MAN HOURS     |           |              | N               |                  |               |   |
|                 |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | OPTIMUM MAN POWER FOR O - LEVEL  |           |              | O               |                  |               |   |

BACKSHOP ต้องการ Man Hours = 800 ชม.คน / INSP    WORKLOAD BACKSHOP : 10 ครั้ง / ปี

BACKSHOP (TOTAL Man Hours/Year) = 800 x 10 = 8,000 Man Hours

**11** . How many man hours are required for Support Equipment (SE) and Aerospace Ground Equipment (AGE) maintenance within 1 year (column L) ?

- a. 5,000 man hours
- b. 6,000 man hours

- c. 7,000 man hours
- d. 8,000 man hours

| INSP \ HRS       | 100  | 200 | 300 | 400 | 500 | 600 | 700 | 800 | 900 | 1000 | 1100 | 1200 | 1300 | 1400 | 1500 | 1600 | 1700 | 1800 | 1900 | 2000 | 2100 | 2200 | 2300 | 2400 | 2500 | 2600 | 2700 | 2800 | 2900 | 3000                             | CREW SIZE | ELAPSED TIME | TOTAL MH / INSP | NO. OF INSP / YR | TOTAL MH / YR |       |    |   |
|------------------|--|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|----------------------------------|-----------|--------------|-----------------|------------------|---------------|-------|----|---|
| <b>O - LEVEL</b> |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                  |           |              |                 |                  |               |       |    |   |
| PREFLIGHT        |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                  |           | 3            | 1               | 3                | 3,000         | A     |    |   |
| EOR              |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                  |           | 2            | 0.1             | 0.2              | 3,000         | B     |    |   |
| POSTFLIGHT       |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                  |           | 4            | 1               | 4                | 3,000         | C     |    |   |
| 100 (O - LEVEL)  | 1  | 2   |     | 3   | 4   |     | 5   | 6   |     | 7    | 8    |      | 9    | 10   |      | 11   | 12   |      | 13   | 14   |      | 15   | 16   |      | 17   | 18   |      | 19   | 20   | 8                                | 24        | 192          | 20              | D                |               |       |    |   |
| UNSCHED          | BREAK RATE 20 % = (3,000 * 20/100) = 600 UNSCHED; CREW SIZE = 4; ELAPSED TIME = 8 HRS; TOTAL MH / UNSCHED = 32 |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                  | 4         | 8            | 32              | 600              | E             |       |    |   |
|                  |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | O - LEVEL TOTAL MAN HOURS / YEAR |           |              | F               |                  |               |       |    |   |
|                  |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 1 MAN YEAR = 1,446 MAN HOURS     |           |              | G               |                  |               |       |    |   |
|                  |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | OPTIMUM MAN POWER FOR O - LEVEL  |           |              | H               |                  |               |       |    |   |
| <b>I - LEVEL</b> |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                  |           |              |                 |                  |               |       |    |   |
| 300 (I - LEVEL)  |  |     | 1   |     |     | 2   |     |     |     | 3    |      |      |      | 4    |      |      |      |      |      |      | 5    |      |      |      |      |      |      |      | 6    |                                  |           |              |                 | 18               | 100           | 1,800 | 10 | I |
| ADDITIONAL WORK  | ADD WORK = 1,200 MH / INSP   |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                  |           |              | 1,200           | 10               | J             |       |    |   |
| BACKSHOP         | BACK SHOP = 800 MH / INSP  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                  |           |              | 800             | 10               | K             |       |    |   |
| SE & AGE MAINT.  | SUPPORT EQUIPMENT & AGE MAINTENANCE = 8,000 MH / YEAR  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                  |           |              |                 |                  | L             |       |    |   |
|                  |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | I - LEVEL TOTAL MAN HOURS / YEAR |           |              | M               |                  |               |       |    |   |
|                  |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 1 MAN YEAR = 1,446 MAN HOURS     |           |              | N               |                  |               |       |    |   |
|                  |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | OPTIMUM MAN POWER FOR O - LEVEL  |           |              | O               |                  |               |       |    |   |

**SUPPORT EQUIPMENT (SE) & AERSPACE GROUND EQUIPMENT (AGE) = 8,000 Man Hours**

**12** How many man hours are required for I - Level maintenance within 1 year (column M) ?

- a. 46,000 man hours
- b. 46,500 man hours

- c. 45,000 man hours
- d. 45,500 man hours

| INSP \ HRS       | 100  | 200 | 300 | 400 | 500 | 600 | 700 | 800 | 900 | 1000 | 1100 | 1200 | 1300 | 1400 | 1500 | 1600 | 1700 | 1800 | 1900 | 2000 | 2100 | 2200 | 2300 | 2400 | 2500 | 2600 | 2700 | 2800 | 2900 | 3000                             | CREW SIZE | ELAPSED TIME | TOTAL MH / INSP | NO. OF INSP / YR | TOTAL MH / YR |       |    |   |
|------------------|--|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|----------------------------------|-----------|--------------|-----------------|------------------|---------------|-------|----|---|
| <b>O - LEVEL</b> |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                  |           |              |                 |                  |               |       |    |   |
| PREFLIGHT        |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                  |           |              | 3               | 1                | 3             | 3,000 | A  |   |
| EOR              |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                  |           |              | 2               | 0.1              | 0.2           | 3,000 | B  |   |
| POSTFLIGHT       |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                  |           |              | 4               | 1                | 4             | 3,000 | C  |   |
| 100 (O - LEVEL)  | 1  | 2   |     | 3   | 4   |     | 5   | 6   |     | 7    | 8    |      | 9    | 10   |      | 11   | 12   |      | 13   | 14   |      | 15   | 16   |      | 17   | 18   |      | 19   | 20   | 8                                | 24        | 192          | 20              | D                |               |       |    |   |
| UNSCHED          | BREAK RATE 20 % = (3,000 * 20/100) = 600 UNSCHED; CREW SIZE = 4; ELAPSED TIME = 8 HRS; TOTAL MH / UNSCHED = 32 |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                  | 4         | 8            | 32              | 600              | E             |       |    |   |
|                  |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | O - LEVEL TOTAL MAN HOURS / YEAR |           |              | F               |                  |               |       |    |   |
|                  |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 1 MAN YEAR = 1,446 MAN HOURS     |           |              | G               |                  |               |       |    |   |
|                  |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | OPTIMUM MAN POWER FOR O - LEVEL  |           |              | H               |                  |               |       |    |   |
| <b>I - LEVEL</b> |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                  |           |              |                 |                  |               |       |    |   |
| 300 (I - LEVEL)  |  |     | 1   |     |     | 2   |     |     |     | 3    |      |      |      | 4    |      |      |      |      |      |      | 5    |      |      |      |      |      |      |      | 6    |                                  |           |              |                 | 18               | 100           | 1,800 | 10 | I |
| ADDITIONAL WORK  | ADD WORK = 1,200 MH / INSP   |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                  |           |              | 1,200           | 10               | J             |       |    |   |
| BACKSHOP         | BACK SHOP = 800 MH / INSP  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                  |           |              | 800             | 10               | K             |       |    |   |
| SE & AGE MAINT.  | SUPPORT EQUIPMENT & AGE MAINTENANCE = 8,000 MH / YEAR  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                  |           |              |                 |                  | L             |       |    |   |
|                  |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | I - LEVEL TOTAL MAN HOURS / YEAR |           |              | M               |                  |               |       |    |   |
|                  |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 1 MAN YEAR = 1,446 MAN HOURS     |           |              | N               |                  |               |       |    |   |
|                  |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | OPTIMUM MAN POWER FOR O - LEVEL  |           |              | O               |                  |               |       |    |   |



**I-LEVEL Man Hours/Year = 300 HOURS INSP (I) + ADD WORK (J) + BACKSHOP (K) + SE & AGE MAINT (L)**

**I-LEVEL (TOTAL Man Hours/Year) = (18,000) + (12,000) + (8,000) + (8,000) = 46,000 Man Hours**

13 What is the number of optimum man power for I – Level maintenance (column O) ?

a. 46,000 / 1,446

b. 46,500 / 1,446

c. 45,000 / 1,446

d. 45,500 / 1,446

| INSP \ HRS       | 100  | 200 | 300 | 400 | 500 | 600 | 700 | 800 | 900 | 1000 | 1100 | 1200 | 1300 | 1400 | 1500 | 1600 | 1700 | 1800 | 1900 | 2000 | 2100 | 2200 | 2300 | 2400 | 2500 | 2600                             | 2700 | 2800 | 2900  | 3000 | CREW SIZE | ELAPSED TIME | TOTAL MH / INSP | NO. OF INSP / YR | TOTAL MH / YR |     |       |   |
|------------------|--|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|----------------------------------|------|------|-------|------|-----------|--------------|-----------------|------------------|---------------|-----|-------|---|
| <b>O - LEVEL</b> |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                  |      |      |       |      |           |              |                 |                  |               |     |       |   |
| PREFLIGHT        |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                  |      |      |       |      |           |              |                 | 3                | 1             | 3   | 3,000 | A |
| EOR              |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                  |      |      |       |      |           |              |                 | 2                | 0.1           | 0.2 | 3,000 | B |
| POSTFLIGHT       |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                  |      |      |       |      |           |              |                 | 4                | 1             | 4   | 3,000 | C |
| 100 (O - LEVEL)  | 1  | 2   |     | 3   | 4   |     | 5   | 6   |     | 7    | 8    |      | 9    | 10   |      | 11   | 12   |      | 13   | 14   |      | 15   | 16   |      | 17   | 18                               |      | 19   | 20    |      |           | 8            | 24              | 192              | 20            | D   |       |   |
| UNSCHED          | BREAK RATE 20 % = (3,000 * 20/100) = 600 UNSCHED; CREW SIZE = 4; ELAPSED TIME = 8 HRS; TOTAL MH / UNSCHED = 32 |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                  | 4    | 8    | 32    | 600  | E         |              |                 |                  |               |     |       |   |
|                  |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | O - LEVEL TOTAL MAN HOURS / YEAR |      |      | F     |      |           |              |                 |                  |               |     |       |   |
|                  |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 1 MAN YEAR = 1,446 MAN HOURS     |      |      | G     |      |           |              |                 |                  |               |     |       |   |
|                  |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | OPTIMUM MAN POWER FOR O - LEVEL  |      |      | H     |      |           |              |                 |                  |               |     |       |   |
| <b>I - LEVEL</b> |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                  |      |      |       |      |           |              |                 |                  |               |     |       |   |
| 300 (I - LEVEL)  |  |     | 1   |     |     | 2   |     |     |     | 3    |      |      |      | 4    |      |      |      |      |      |      | 5    |      |      |      |      |                                  |      |      |       |      |           |              | 18              | 100              | 1,800         | 10  | I     |   |
| ADDITIONAL WORK  | ADD WORK = 1,200 MH / INSP   |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                  |      |      | 1,200 | 10   | J         |              |                 |                  |               |     |       |   |
| BACKSHOP         | BACK SHOP = 800 MH / INSP  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                  |      |      | 800   | 10   | K         |              |                 |                  |               |     |       |   |
| SE & AGE MAINT.  | SUPPORT EQUIPMENT & AGE MAINTENANCE = 8,000 MH / YEAR  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |                                  |      |      |       |      | L         |              |                 |                  |               |     |       |   |
|                  |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | I - LEVEL TOTAL MAN HOURS / YEAR |      |      | M     |      |           |              |                 |                  |               |     |       |   |
|                  |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 1 MAN YEAR = 1,446 MAN HOURS     |      |      | N     |      |           |              |                 |                  |               |     |       |   |
|                  |  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | OPTIMUM MAN POWER FOR O - LEVEL  |      |      | O     |      |           |              |                 |                  |               |     |       |   |



Optimum Man Power for I-LEVEL = (I-LEVEL Man Hours/Year) / (1 Man Year)

Optimum Man Power for I-LEVEL = (46,000) / (1,446)





กรมช่างอากาศยาน  
Directorate Of Aeronautical Engineering

# *RTAF AIRCRAFT MAINTENANCE*

## *MAN POWER ANALYSIS*

### *Test & Tutorial*

เป็นองค์กรที่มุ่งเน้นการพัฒนากระบวนการซ่อมสร้างอากาศยาน ให้มีความปลอดภัยและเป็นมาตรฐานสากล