



NATIONAL RADIO ASTRONOMY OBSERVATORY

POST OFFICE BOX 2
GREEN BANK, WV 24944-0002
TELEPHONE 304-456-2011

FAX 304-456-2229

MEMORANDUM

To: Distribution

From: Bill Porter *BP*

Subj: GBT Budget

Please review the attached division budget sheets and send me your comments regarding the 1998 allocations, which you should consider to be the final allocation, i.e., there are no "future years" allocations--you have to complete the work with what is shown in the '98 column.

Bob Hall will want to discuss the budget with you the next time he is in Green Bank.

Thanks.

Distribution:

Lockman (Site, Electronics)

Fleming (Site)

King (Antenna)

Weadon (Electronics)

Parker (Surface & Pointing)

Lacasse (Surface & Pointing, Servo)

Hunt (Monitor & Control, Data Analysis)

McKinnon (All)

BUD 98.01

GREEN BANK TELESCOPE
MONITOR AND CONTROL

| PROJECT / YEAR | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | TOTAL |
|--|------|--------|---------|---------|---------|--------|--------|--------|---------|-----------|
| 127355.3030.101 General | 0 | 66,880 | 96,598 | 71,806 | 32,036 | 8,212 | 33,086 | 61,320 | 135,000 | 504,938 |
| 127355.3010.101 Salaries/Wages | 0 | 0 | 71,072 | 159,175 | 193,075 | 27,786 | 0 | 0 | 0 | 451,108 |
| 127355.3020.101 Benefits | 0 | 0 | 20,065 | 31,749 | 54,851 | 7,801 | 0 | 0 | 0 | 114,466 |
| 127355.3061.101 Travel-Gen'l (Dmestic) | 0 | 7,626 | 4,166 | 3,690 | 2,485 | 1,201 | 2,024 | 1,532 | 2,000 | 24,724 |
| 127355.3062.101 Travel-Gen'l (Foreign) | na | na | na | na | na | 0 | 0 | 0 | 0 | 0 |
| 127355.3063.101 Travel-Reloc | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL Monitor and Control | 0 | 74,506 | 191,901 | 266,420 | 282,447 | 45,000 | 35,110 | 62,852 | 137,000 | 1,095,236 |

NOTES:

RE: M & S

PN 101 - (Ref: MHC 6/29/92; 11/15/94) Includes items shown plus Schraml plus relocation expenses
Does NOT include weather station or control building cabling

| RE: PERSONNEL | '90 | '91 | '92 | '93 | '94 | '95 | '96 | '97 |
|---------------|-----|-----|-----|-----|-----|-----|-----|-----|
| Benett | | | 12 | 12 | 12 | | | |
| Brandt | | | | 10 | 12 | | | |
| Winchell | | | | 3 | 9 | 9 | | |
| Wells | | | 6 | 12 | 12 | | | |

BUD 98.01

GREEN BANK TELESCOPE
DATA ANALYSIS

| PROJECT / YEAR | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | TOTAL |
|---------------------------------------|------|--------|--------|--------|--------|-------|------|------|--------|---------|
| 127356.3030.101 General | 0 | 0 | 6,993 | 200 | 0 | 1,995 | 0 | 0 | 99,000 | 108,188 |
| 127356.3010.101 Salaries/Wages | 0 | 12,600 | 53,000 | 55,900 | 57,900 | 0 | 0 | 0 | 0 | 179,400 |
| 127356.3020.101 Benefits | 0 | 3,651 | 15,153 | 14,508 | 16,449 | 0 | 0 | 0 | 0 | 49,761 |
| 127356.3061.101 Travel-Genl (Dmestic) | 0 | 48 | 1,131 | 120 | 1,626 | 60 | 0 | 0 | 0 | 2,985 |
| 127356.3062.101 Travel-Genl (Foreign) | na | na | na | na | na | 0 | 0 | 0 | 0 | 0 |
| 127356.3063.101 Travel-Reloc | 0 | 6,111 | 0 | 60 | 0 | 0 | 0 | 0 | 0 | 6,171 |
| TOTAL Data Analysis | 0 | 22,410 | 76,277 | 70,788 | 75,975 | 2,055 | 0 | 0 | 99,000 | 346,505 |

NOTES:

RE: M & S

PN 101 - Includes computer and interfaces (Ref: R. Payne memo 2/3/93; 11/15/94)

| RE: PERSONNEL | '90 | '91 | '92 | '93 | '94 | '95 | '96 | '97 |
|---------------|-----|-----|-----|-----|-----|-----|-----|-----|
| B. Payne | | 2 | 12 | 12 | 12 | | | |

Hunt

GREEN BANK TELESCOPE
PROJECT BUDGET
(ANNUAL \$)

BUD 98.02

| DIVISION/YEAR | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | TOTAL |
|-------------------------|---------|------------|-----------|-----------|-----------|-----------|-----------|-----------|---------|-----------|------------|
| 40401 PREL. DESIGN | 263,358 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 263,358 |
| 127350 SITE/BLDG | 0 | 24,065 | 21,180 | 204,775 | 14,664 | 36,213 | 589 | 24,688 | 18,529 | 0 | 344,703 |
| 127351 ANTENNA | 0 | 55,439,592 | 468,716 | 397,166 | 694,241 | 347,418 | 342,151 | 370,236 | 152,858 | 153,488 | 58,365,866 |
| 127352 ELECTRONICS | 0 | 148,614 | 191,572 | 508,728 | 780,788 | 506,987 | 349,590 | 252,199 | 187,512 | 283,800 | 3,209,790 |
| 127354 SURFACE/POINTING | 0 | 390,791 | 1,801,954 | 2,804,258 | 1,077,819 | 685,027 | 398,524 | 190,722 | 248,808 | 395,000 | 7,992,903 |
| 127355 MONITOR/CONTROL | 0 | 0 | 74,506 | 191,901 | 266,420 | 282,447 | 45,000 | 35,110 | 62,852 | 137,000 | 1,095,236 |
| 127356 DATA ANALYSIS | 0 | 0 | 22,410 | 76,277 | 70,788 | 75,975 | 2,055 | 0 | 0 | 99,000 | 346,505 |
| 127357 SERVO | 0 | 0 | 19,016 | 41,857 | 52,757 | 700 | 115,399 | 57,041 | 62,042 | (57,000) | 291,812 |
| 127359 PROJ MANAGEMENT | 0 | 322,586 | 291,554 | 318,041 | 390,088 | 275,536 | 273,341 | 202,685 | 193,388 | 318,300 | 2,585,519 |
| SUBTOTAL | 263,358 | 56,325,648 | 2,890,908 | 4,543,003 | 3,347,565 | 2,210,303 | 1,526,649 | 1,132,681 | 925,989 | 1,329,588 | 74,495,692 |
| CONTINGENCY | NA | NA | NA | NA | NA | NA | NA | NA | NA | 5,808 | 5,808 |
| TOTAL | 263,358 | 56,325,648 | 2,890,908 | 4,543,003 | 3,347,565 | 2,210,303 | 1,526,649 | 1,132,681 | 925,989 | 1,335,396 | 74,501,500 |

BUD 98.02

GREEN BANK TELESCOPE
MONITOR AND CONTROL

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| 127355.3010.101 Salaries/Wages | 0 | 0 | 71,072 | 159,175 | 193,075 | 27,786 | 0 | 0 | 0 | 451,108 |
| 127355.3020.101 Benefits | 0 | 0 | 20,065 | 31,749 | 54,851 | 7,801 | 0 | 0 | 0 | 114,466 |
| 127355.3061.101 Travel-Gen'l (Dmestic) | 0 | 7,626 | 4,166 | 3,690 | 2,485 | 1,201 | 2,024 | 1,532 | 2,000 | 24,724 |
| 127355.3062.101 Travel-Gen'l (Foreign) | na | na | na | na | na | 0 | 0 | 0 | 0 | 0 |
| 127355.3063.101 Travel-Reloc | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL Monitor and Control | 0 | 74,506 | 191,901 | 266,420 | 282,447 | 45,000 | 35,110 | 62,852 | 137,000 | 1,095,236 |

NOTES:

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|---------------|-----|-----|-----|-----|-----|-----|-----|-----|
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| Brandt | | | | 10 | 12 | | | |
| Winchell | | | | 3 | 9 | 9 | | |
| Wells | | | 6 | 12 | 12 | | | |

BUD 98.02

GREEN BANK TELESCOPE
DATA ANALYSIS

| PROJECT / YEAR | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | TOTAL |
|---------------------------------------|------|--------|--------|--------|--------|-------|------|------|--------|---------|
| 127356.3030.101 General | 0 | 0 | 6,993 | 200 | 0 | 1,995 | 0 | 0 | 99,000 | 108,188 |
| 127356.3010.101 Salaries/Wages | 0 | 12,600 | 53,000 | 55,900 | 57,900 | 0 | 0 | 0 | 0 | 179,400 |
| 127356.3020.101 Benefits | 0 | 3,651 | 15,153 | 14,508 | 16,449 | 0 | 0 | 0 | 0 | 49,761 |
| 127356.3061.101 Travel-Genl (Dmestic) | 0 | 48 | 1,131 | 120 | 1,626 | 60 | 0 | 0 | 0 | 2,985 |
| 127356.3062.101 Travel-Genl (Foreign) | na | na | na | na | na | 0 | 0 | 0 | 0 | 0 |
| 127356.3063.101 Travel-Reloc | 0 | 6,111 | 0 | 60 | 0 | 0 | 0 | 0 | 0 | 6,171 |
| TOTAL Data Analysis | 0 | 22,410 | 76,277 | 70,788 | 75,975 | 2,055 | 0 | 0 | 99,000 | 346,505 |

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|---------------|-----|-----|-----|-----|-----|-----|-----|-----|
| B. Payne | | 2 | 12 | 12 | 12 | | | |