

D4 SERIES C vs. D4 (7U)  
SKIDDING LOGS

CATERPILLAR

# Job Report

DATE 12-15-60

## D4 SERIES C PRODUCES 33.3% MORE THAN 7U D4 AT 18.5% LESS COST

**JOB:** Arch skidding tree-length logs for 1/4 mile

**LOCATION:** New Bern, North Carolina

**DATE:** May, 1960

**PURPOSE:** To compare the logging production of a D4C with an older D4

**EQUIPMENT:** D4C (40A), logging arch, winch, 18" track shoes  
D4 (7U), logging arch, winch, 18" track shoes

**PERSONNEL:** J. R. Sterle - Caterpillar Tractor Co.  
T. J. Zarse - Caterpillar Tractor Co.

**JOB DESCRIPTION:** Clearing 5,000 acres for a "Voice of America" transmitting station. The D4's were arch skidding yellow pin and gum (12" - 16" average D.B.H.) tree-length logs 1/4 mile over flat, brushy, wet, coastal lowlands.



D4 Series C & 7U D4 at landing in New Bern, N.C.

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PRODUCTION

One way skid dist  
 Cycle time  
 Cycles per hour  
 Load per skid, (Doyle Rule)  
 Production per hour  
 Production per 9 hour day

D4C

1/4 mi.  
 28 min.  
 2.14  
 700 bd. ft.  
 1,500 bd. ft.  
 13,500 bd. ft.

D4 (7U)

1/4 mi.  
 30 min.  
 2.00  
 584 bd. ft.  
 1,168 bd. ft.  
 10,500 bd. ft.

PRODUCTION ADVANTAGE33.3%OWNING & OPERATING COSTS

Purchase price  
 Depreciation period - 4 years  
 Depreciation  
 Interest, ins. & taxes  
 Owning Cost

\$12,423  
 8,000 hrs.  
 \$1.55/hr.  
 .37  
 \$1.92/hr.

\$11,563  
 8,000 hrs.  
 \$1.44/hr.  
 .35  
 \$1.79/hr.

Fuel, lubricants, filters  
 Repairs (100% of Depr Cost)  
 Operator  
 Operating Cost

\$.43/hr.  
 1.55  
 1.25  
 \$3.23

\$.43/hr.  
 1.44  
 1.25  
 \$3.12

Total Hourly Owning & Operating Cost

\$5.15

\$4.91

Cost Per 1,000 bd. ft.

\$3.43

\$4.21

COST ADVANTAGE18.5%

## CONCLUSIONS:

1. The increased power in the D4C made it possible to skid 20% more wood per turn and did it in one higher gear than the 7U D4.
2. An additional advantage which is significant in logging applications is the 14-inch ground clearance made available by the new larger sprocket and the new cast, one piece transmission case.
3. An increased production of 33% at a savings of 18.5% is a powerful selling tool to use on a contractor who is reluctant to buy new equipment because his present equipment is still running.

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