## (c) Climb

The next step in the flight plan is to determine the necessary climb segment components.

The desired cruise pressure altitude and corresponding cruise outside air temperature values are the first variables to be considered in determining the climb components from the Fuel, Time and Distance to Climb graph (Figure 5-19). After the fuel, time and distance for the cruise pressure altitude and outside air temperature values have been established, apply the existing conditions at the departure field to graph (Figure 5-19). Now, subtract the values obtained from the graph for the field of departure conditions from those for the cruise pressure altitude.

The remaining values are the true fuel, time and distance components for the climb segment of the flight plan corrected for field pressure altitude and temperature.

The following values were determined from the above instructions in the flight planning example. (1) Cruise Pressure Altitude

(2) Cruise OAT	16°C
(3) Time to Climb (12.0 min. minus	
3.0 min.)	9.0 min.
(4) Distance to Climb (16.0 miles minus	
4.0 miles)	12.0 miles

(5) Fuel to Climb (3 gal. minus 1.0 gal.)

## (d) Descent

The descent data will be determined prior to the cruise data to provide the descent distance for establishing the total cruise distance

Utilizing the cruise pressure altitude and OAT, determine the basic fuel, time and distance for descent (Figure 5-31). These figures must be adjusted for the field pressure altitude and temperature at the destination airport. To find the necessary adjustment values, use the existing pressure altitude and temperature conditions at the destination airport as variables to find the fuel, time and distance

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5000 ft.

2.0 gal.\*

<sup>\*</sup>reference Figure 5-19