

| MODEL(S)<br>A-20B STANDARD<br>CONFIGURATION  |                    |  |                                 | FLIGHT OPERATION INSTRUCTION CHART       |                   |                    |                   |   |                   |                    |            | SHEET 1 OF 2 SHEETS<br>EXTERNAL LOAD ITEMS |                    |                          |                           | 5-1-42  |        |      |        |        |        |        |           |  |        |         |                  |        |        |      |        |        |
|--|--------------------|--|---------------------------------|--|-------------------|--------------------|-------------------|---|-------------------|--------------------|------------|--|--------------------|--------------------------|---------------------------|---|--------|------|--------|--------|--------|--------|-----------|--|--------|---------|------------------|--------|--------|------|--------|--------|
| WEIGHT <b>22,060</b> TO <b>19,310</b> POUNDS   |                    |  |                                 |  |                   |                    |                   |   |                   |                    |            |  |                    | LWR. COWL FLAPS 1/2 OPEN |                           |   |        |      |        |        |        |        |           |  |        |         |                  |        |        |      |        |        |
| <b>INSTRUCTIONS:</b> (THIS CHART APPLIES ONLY TO THE ABOVE MODELS WHILE WITHIN THE ABOVE WEIGHT LIMITS WITH ABOVE ITEMS) |                    |  |                                 |  |                   |                    |                   |   |                   |                    |            |  |                    |                          |                           |   |        |      |        |        |        |        |           |  |        |         |                  |        |        |      |        |        |
| <b>ENGINE MODEL(S)</b><br>R-2600-11  |                    | 1. OPPOSITE FUEL TO BE USED LOCATE AIR MILES (RANGE) DESIRED (AVOID CRUISING WITH "MAXIMUM CONTINUOUS POWER" EXCEPT IN EMERGENCY)<br>2. VERTICALLY BELOW AND OPPOSITE DESIRED CRUISING ALTITUDE READ OPTIMUM CRUISING R.P.M. AND INDICATED AIRSPEED (I. A. S.)<br>3. MIXTURE CONTROL (AND BLOWER CONTROL IF ANY) ARE INDICATED IN LOWER HALF OF CHART (FOR DETAILED INSTRUCTIONS SEE SECT. II PAR. 11)<br>4. MANIFOLD PRESSURE (M.P.)—GALLONS PER HOUR (G.P.H.)—TRUE AIRSPEED (T. A. S.) ARE APPROX. MAXIMUM VALUES FOR REFERENCE<br>5. USE CARE IN INITIAL ADJUSTMENT OF ENGINE CONTROLS THEN AVOID MANIPULATION — HOURLY RE-ESTABLISHMENT OF I. A. S. IS SUFFICIENT.<br>6. TO DETERMINE ENDURANCE IN HOURS: DIVIDE GAL OF FUEL AVAILABLE BY G. P. H. (GAL. PER HR.) FOR THE CONDITIONS SELECTED. |                                 |  |                   |                    |                   |   |                   |                    |            |  |                    |                          |                           |   |        |      |        |        |        |        |           |  |        |         |                  |        |        |      |        |        |
| STATUTE AIR-MILES  | NAUTICAL AIR-MILES | FUEL* GAL.   | STATUTE AIR-MILES               | NAUTICAL AIR-MILES                       | STATUTE AIR-MILES | NAUTICAL AIR-MILES | STATUTE AIR-MILES | NAUTICAL AIR-MILES  | STATUTE AIR-MILES | NAUTICAL AIR-MILES | FUEL* GAL. | STATUTE AIR-MILES                          | NAUTICAL AIR-MILES |                          |                           |   |        |      |        |        |        |        |           |  |        |         |                  |        |        |      |        |        |
|  |                    | 634  | 54 GAL. NOT AVAILABLE IN FLIGHT |  |                   |                    |                   |   |                   |                    |            | 634  |                    |                          |                           |   |        |      |        |        |        |        |           |  |        |         |                  |        |        |      |        |        |
| 555  | 480                | 580  | 850                             | 740                                      |                   |                    |                   |   |                   |                    | 580        | 1210                                       | 1050               |                          |                           |   |        |      |        |        |        |        |           |  |        |         |                  |        |        |      |        |        |
| 515  | 445                | 540  | 800                             | 700                                      |                   |                    |                   |   |                   |                    | 540        | 1130                                       | 980                |                          |                           |   |        |      |        |        |        |        |           |  |        |         |                  |        |        |      |        |        |
| 480  | 415                | 500  | 740                             | 640                                      |                   |                    |                   |   |                   |                    | 500        | 1040                                       | 900                |                          |                           |   |        |      |        |        |        |        |           |  |        |         |                  |        |        |      |        |        |
| 440  | 380                | 460  | 680                             | 590                                      |                   |                    |                   |   |                   |                    | 460        | 960  | 830                |                          |                           |   |        |      |        |        |        |        |           |  |        |         |                  |        |        |      |        |        |
| 400  | 350                | 420  | 620                             | 540                                      |                   |                    |                   |   |                   |                    | 420        | 880  | 760                |                          |                           |   |        |      |        |        |        |        |           |  |        |         |                  |        |        |      |        |        |
| 365  | 315                | 380  | 560                             | 480                                      |                   |                    |                   |   |                   |                    | 380        | 790  | 680                |                          |                           |   |        |      |        |        |        |        |           |  |        |         |                  |        |        |      |        |        |
| 325  | 280                | 340  | 500                             | 430                                      |                   |                    |                   |   |                   |                    | 340        | 710  | 610                |                          |                           |   |        |      |        |        |        |        |           |  |        |         |                  |        |        |      |        |        |
| 290  | 250                | 300  | 440                             | 380                                      |                   |                    |                   |   |                   |                    | 300        | 620  | 540                |                          |                           |   |        |      |        |        |        |        |           |  |        |         |                  |        |        |      |        |        |
| 250  | 220                | 260  | 380                             | 330                                      |                   |                    |                   |   |                   |                    | 260        | 540  | 470                |                          |                           |   |        |      |        |        |        |        |           |  |        |         |                  |        |        |      |        |        |
| 210  | 180                | 220  | 320                             | 270                                      |                   |                    |                   |   |                   |                    | 220        | 460  | 400                |                          |                           |   |        |      |        |        |        |        |           |  |        |         |                  |        |        |      |        |        |
| 170  | 150                | 180  | 260                             | 220                                      |                   |                    |                   |   |                   |                    | 180        | 370  | 320                |                          |                           |   |        |      |        |        |        |        |           |  |        |         |                  |        |        |      |        |        |
| 135  | 115                | 140  | 200                             | 170                                      |                   |                    |                   |   |                   |                    | 140        | 290  | 250                |                          |                           |   |        |      |        |        |        |        |           |  |        |         |                  |        |        |      |        |        |
| 95   | 80                 | 100  | 140                             | 120                                      |                   |                    |                   |   |                   |                    | 100        | 210  | 180                |                          |                           |   |        |      |        |        |        |        |           |  |        |         |                  |        |        |      |        |        |
| 55   | 50                 | 60   | 80                              | 70                                       |                   |                    |                   |   |                   |                    | 60         | 120  | 100                |                          |                           |   |        |      |        |        |        |        |           |  |        |         |                  |        |        |      |        |        |
| 20   | 15                 | 20   | 30                              | 20                                       |                   |                    |                   |   |                   |                    | 20         | 40   | 30                 |                          |                           |   |        |      |        |        |        |        |           |  |        |         |                  |        |        |      |        |        |
| MAXIMUM CONTINUOUS POWER   |                    |  | ALTERNATE CRUISING CONDITIONS   |  |                   |                    |                   |   |                   |                    |            |  |                    |                          | MAXIMUM RANGE - ENDURANCE |   |        |      |        |        |        |        |           |  |        |         |                  |        |        |      |        |        |
| R.P.M.   | M.P.<br>(IN. HG.)  | G.P.H.   | T.A.S.                          | DENSITY                                  | ALTITUDE<br>FEET  | I                  |                   |   |                   |                    | II         |  |                    |                          |                           | III   |        |      |        |        | IV     |        |           |  |        | DENSITY | ALTITUDE<br>FEET | R.P.M. | I.A.S. | M.P. | G.P.H. | T.A.S. |
|  |                    |  |                                 |  |                   | R.P.M.             | I.A.S.            | M.P.  | G.P.H.            | T.A.S.             | R.P.M.     | I.A.S.                                     | M.P.               | G.P.H.                   | T.A.S.                    | R.P.M.  | I.A.S. | M.P. | G.P.H. | T.A.S. | R.P.M. | I.A.S. | M.P.      | G.P.H.   | T.A.S. |         |                  |        |        |      |        |        |
| 2300   | 17.5               | 144  | 280                             |  | 30,000            | AUTO-LEAN          |                   |   |                   |                    |            |  |                    |                          |                           |   |        |      |        |        |        |        |           |  |        | 30,000  | AUTO-LEAN        |        |        |      |        |        |
| 2300   | 22.5               | 186  | 278                             |  | 25,000            |                    |                   |   |                   |                    |            |  |                    |                          |                           |   |        |      |        |        |        |        |           |  |        | 25,000  |                  |        |        |      |        |        |
| 2300   | 28                 | 233  | 294                             |  | 20,000            | 1900               | 204               | 25  | 169               | 268                |            |  |                    |                          |                           |   |        |      |        |        |        |        | 20,000    | 1900   | 156    | 18      | 81               | 204    |        |      |        |        |
| 2300   | 34.5               | 310  | 303                             |  | 15,000            | 1900               | 216               | 27.5  | 182               | 264                |            |  |                    |                          |                           |   |        |      |        |        |        |        | 15,000    | 1700   | 152    | 14      | 73               | 194    |        |      |        |        |
| 2300   | 38                 | 308  | 305                             |  | 12,000            | 1900               | 221               | 24  | 147               | 253                |            |  |                    |                          |                           |   |        |      |        |        |        |        | 12,000    | 1700   | 151    | 15.8    | 72               | 174    |        |      |        |        |
| 2300   | 39                 | 308  | 294                             |  | 9,000             | 1900               | 226               | 25  | 151               | 232                |            |  |                    |                          |                           |   |        |      |        |        |        |        | 9,000     | 1600   | 152    | 18      | 70               | 167    |        |      |        |        |
| 2300   | 34.7               | 300  | 291                             |  | 6,000             | 1900               | 229               | 26  | 142               | 244                |            |  |                    |                          |                           |   |        |      |        |        |        |        | 6,000     | 1500   | 159    | 21.2    | 67               | 167    |        |      |        |        |
| 2300   | 34.7               | 297  | 279                             |  | 3,000             | 1900               | 233               | 27  | 143               | 237                |            |  |                    |                          |                           |   |        |      |        |        |        |        | 3,000     | 1500   | 165    | 23      | 68               | 168    |        |      |        |        |
| 2300   | 34.7               | 264  | 269                             |  | SEA LEVEL         | 1900               | 236               | 29  | 140               | 230                |            |  |                    |                          |                           |   |        |      |        |        |        |        | SEA LEVEL | 1500   | 172    | 24.5    | 72               | 166    |        |      |        |        |
| RANGE VALUES IN THIS COLUMN APPLY ONLY AT 5,000 FT. ALT.   |                    |  |                                 | *ALLOW 54 GAL. FOR WARM-UP TAKE-OFF ETC. |                   |                    |                   | ALL RANGE VALUES ARE BASED ON NO WIND - 0-10% RESERVE FUEL 12 U.S. GAL EQUAL 10 IMP. GAL. |                   |                    |            |  |                    |                          |                           | HEAVY NUMBERS! - USE AUTO-RICH MIXTURE LIGHT NUMBERS! - USE AUTO-LEAN MIXTURE WITH TWO SPEED SUPERCHARGER! - USE HIGH BLOWER ABOVE HEAVY LINE ONLY<br><b>RED FIGURES ARE PRELIMINARY - SUBJECT TO REVISION AFTER FLIGHT CHECK</b> |        |      |        |        |        |        |           | ABBREVIATIONS<br>I.A.S.: INDICATED AIRSPEED<br>M.P. : MANIFOLD PRESSURE (IN. HG.)<br>G.P.H.: GALLONS PER HOUR (TOTAL)<br>T.A.S.: TRUE AIRSPEED (M.P.H.)<br>F.T.: FULL THROTTLE OPERATION |        |         |                  |        |        |      |        |        |

Figure 26—Flight Operation Instruction Chart