One of the features of the TIGHAR website (www.tighar.org) is the periodic mounting of original documents for public use. While it is not possible to make our entire research collection available in that way, it does hit the highlights. The documents below are part of that collection.

In the final days of preparations for Amelia Earhart’s first world flight attempt, Lockheed engineer Clarence “Kelly” Johnson sent three telegrams in which he discussed the power management procedures which he recommended that Earhart follow to obtain the best efficiency on her flight from Oakland, California to Honolulu, Territory of Hawaii. Johnson arrived at his recommendations through actual test flights with Amelia in her own airplane. The numbers were checked and confirmed by A. H. Marshall at Pratt & Whitney Aircraft in Hartford, Connecticut. For the serious student of the Earhart disappearance, these documents provide valuable insight into the endurance capabilities of NR16020.

**The Kelly Johnson Telegrams**

**TWS**

**Mar 11 1937**

**AMELIA EARHART**

**MUNICIPAL AIRPORT**

**OAKLAND CALIF**

I AM ADVISING MARSHALL AS FOLLOWS QUOTE COMPLETE FUEL CONSUMPTION TESTS ON EARHART ELECTRA AT FIVE THOUSAND FEET ALTITUDE WITH TWENTY TO THIRTY DEGREE HEAD TEMPERATURE RISE GIVE FOLLOWING STOP NINETEEN HUNDRED RPM TWENTY NINE INCHES WITH CAMBRIDGE ZERO SEVEN ONE GIVES FIFTY ONE POINT FIVE GALLONS PER HOUR FOR AIRPLANE STOP EIGHTEEN HUNDRED AT TWENTY EIGHT AT ZERO SEVEN ON GIVES FIFTY TWO POINT FOUR GALLONS PER HOUR STOP FIFTEEN HUNDRED FIFITY AT TWENTY FOUR AT ZERO SEVEN ZERO GIVES THIRTY EIGHT POINT SIX STOP EIGHTEEN HUNDRED AT TWENTY SIX AT ZERO SEVEN ONE GIVES FORTY THREE STOP SEVENTEEN HUNDRED AT TWENTY TWO AT ZERO SEVEN ZERO GIVES THIRTY SIX STOP OTHER VALUES ALSO TESTED STOP HEAT TEMPERATURES NOT OVER THREE SIX FIVE STOP ENGINES SMOOTH USED NEW PLUGS AND HAD EXCELLENT CONDITIONS STOP WE RECOMMEND FOLLOWING POWER AND CAMBRIDGE SETTINGS ON FLIGHT STOP THREE HOURS EIGHTEEN HUNDRED RPM TWENTY EIGHT INCHES FOUR THOUSAND FEET AT CAMBRIDGE SETTING ZERO SEVEN THREE AND FIFTY EIGHT GALLONS HOUR STOP THREE HOURS SEVENTEEN HUNDRED RPM TWENTY SIX POINT FIVE INCHES SIX THOUSAND FEET AT ZERO SEVEN TWO AT FORTY NINE GALLONS PER HOUR STOP THREE HOURS SEVENTEEN HUNDRED RPM TWENTY FIVE INCHES EIGHT THOUSAND FEET AT ZERO SEVEN TWO AT FORTY THREE GALLONS STOP AFTER NINE HOURS FLY AT SIXTEEN HUNDRED RPM TWENTY FOUR INCHES OR FULL THROTTLE TEN THOUSAND FEET AT ZERO SEVEN TWO AT THIRTY EIGHT GALLONS PER HOUR STOP AWAITS YOUR COMMENTS BY WIRE TODAY FOR ADVISING EARHART UNQUOTE WILL ADVISE YOU MORE FULLY TONIGHT STOP PLEASE WIRE RESULTS OF YOUR TEST HOP OVER OCEAN ON WAY TO OAKLAND AT ONCE.

C L JOHNSON

LOCKHEED AIRCRAFT CORPORATION
TWS

MAR 11 1937

AMELIA EARHART
MUNICIPAL AIRPORT
OAKLAND CALIF

WIRE FROM MARSHALL CONFIRMS MY RECOMMENDATION OF POWER AND FUEL CONSUMPTION STOP REMEMBER TO LEAN MIXTURE VERY SLOWLY STOP NINE HUNDRED GALLONS FUEL AMPLE FOR FORTY PERCENT EXCESS RANGE TO HONOLULU FOR CONDITIONS GIVEN IN WIRE THIS MORNING STOP IF NECESSARY MIXTURE CAN BE LEANED TO ZERO SEVEN ZERO ON LAST HALF OF FLIGHT IF EXCEPTIONAL HEAD WINDS EXIST STOP CHECK SPARK PLUGS BEFORE TAKEOFF STOP WIRE ME FUEL REQUIRED FOR TRIP TO HAWAII ON ARRIVAL THERE SO I CAN RECHECK FUEL REQUIRED FOR OTHER HOP STOP PHONE ME AT BURBANK TWO SEVEN FOUR SIX TONIGHT IF YOU NEED MORE DATA STOP HOLD ALTITUDE GIVEN IN WIRE WITHIN TWO THOUSAND FEET IF WINDS UNDER TEN MPH ARE ENCOUNTERED

C L JOHNSON
LOCKHEED AIRCRAFT CORPORATION
CLJ:S
TWS

MAR 13 1937

AMELIA EARHART
MUNICIPAL AIRPORT
OAKLAND CALIF

REVISED FLIGHT DATA FOR EIGHT THOUSAND FEET AT BEGINNING OF FLIGHT AS FOLLOWS STOP
CLIMB AT TWO THOUSAND FIFTY RPM TWENTY EIGHT AND ONE HALF INCHES AT ZERO SEVEN EIGHT TO
EIGHT THOUSAND FEET STOP FIRST THREE HOURS AT NINETEEN HUNDRED RPM TWENTY EIGHT INCHES
AND ZERO SEVEN THREE AT SIXTY GALLONS PER HOUR STOP NEXT THREE HOURS AT EIGHTEEN HUNDRED RPM TWENTY SIX POINT FIVE INCHES AT ZERO SEVEN TWO AT FIFTY ONE GALLONS PER HOUR STOP AFTER
SIX HOURS USE DATA GIVEN IN PREVIOUS LETTER OR WIRE STOP GALLONS PER HOUR SHOULD RUN
LITTLE UNDER FIGURES GIVEN

C L JOHNSON

LOCKHEED AIRCRAFT CORPORATION

CLJ:S