with P-38 300 gallon drop tank modification and he agreed. I gave
him status of the project and he said that half of the enroute
stations had responded to his message and all had confirmed 91 octane
fuel availability. He advised that Maj. Nelson was coming out the
next day and would have Theodore Nikoli with him.

Lt. Cook and I then went over the radio and navigational equip-
ment analysis with the shop specialists. We had adequate commu-
nication capability, but no automatic radio compass system. I had
made up some of my logs for the flight and our primary navigation
aids were radio beacons and a few radio range systems. The radio
compass requirement was so important that I felt we must have
redundant capability and I asked the shop personnel if they could
install an AAF ARN-7 radio compass system. They said they needed
to develop an installation plan, but felt confident they could do it.
I asked them to use equipment that had been "burned in" and from
the most reliable manufacturers. They reminded us that they had
not been able to operate the equipment because batteries were still
disconnected. I asked them to let us know as soon as possible the
feasibility of the proposed ARN-7 installation.

Lt. Cook reported that most of the work was going well, ex-
cept the spark plug check. They still had not been able to remove
all the plugs located on the inside banks of the V-12 engine. They
could feel the plugs, but could not see them or get existing tools on
them. Lt. Cook had the engine shop and the two tech reps working
to design tools to do the job. We knew the Germans had to replace
plugs and there had to be a way to do it. We then went over the
electrical, hydraulic, and flight control systems. We had what we
needed and they had been serviced, so Cook started to button up
for the closeout phase.

I began to hear the JU 88 being referred to as "Baksheesh." We
had a number of inquiries about how we had gained possession
of it. We jokingly indicated that a Rumanian pilot had delivered it
to the RAF as a gift from Der Fuehrer and the British in turn gave it
to the U.S. "Baksheesh" is a term used by Egyptian hawkers and
beggars trying to get something for nothing. The GI's used the term
jokingly, but it soon became a term that stuck.

Sgt. Connor reported they had made an adapter to remove the
difficult plugs that was working. Cook told them to install the new
plugs they found in the salvage yard, as the engine shop had checked
them and found them to be excellent. We then went over the instru-
ment systems. Sgt. Eldered H. Johnson had run a calibration check
on the altimeter and airspeed system and made up a calibration card
for the airspeed indicator. We decided not to replace any instru-
ments as we now understood them and their units of measure-
ment. We were not sure the JU 88 static-pressure system would
work accurately on USAAF instruments. Sgt. Johnson's card would
permit me to convert kilometers to miles per hour. The heading
reference instrument combined the direct gyro, primary compass,
and radio bearing functions in a single integrated instrument. There
was a switch labeled "Kurtz Sten" they had not been able to iden-
tify. They had called for anyone that spoke German and a man from
the mess hall bake shop responded, but turned out to be extremely
nontechnical. The best he could come up with was "short steerer".
We pondered this for a while, but could not determine its function.
I asked the instrument people to see if they could remove the in-
strument to gain enough clearance to pick up some of the wire con-
sult we trace wire bundles. We found the bundle routed into the
aft fuselage. The bundle went to a servo-like assembly with
control cables connecting to the rudder cables. All of a sudden we
realized it was part of the autopilot system. Further checks revealed
that the directional integrated instrument also included a heading-
hold system. We could not find any autopilot functions for pitch or
lateral control; it controlled only heading.

The electric shop personnel returned to affirm that they could
install the ARN-7. They went over the planned layout, with the
directional readout instrument on the main instrument panel, the
control unit located on the right side of the cockpit easily acces-
sible to the pilot, the receiver in the aft fuselage, and loop and sen-
sing antenna units on top of the fuselage just aft of the wing. They
were going to use the shop mock-up system, as it had some time on
it, was in excellent condition, and was made by the original design
contractor. They had also been able to get control cables and wire
bundles with plugs from aircraft in the salvage yard. We told them
it looked good and to go ahead with the installation.

I discussed with Lt. Cook the need for reserve or emergency
electrical power in the event we lost our normal electrical system.
We decided to install another battery that could be manually
switched onto the main electrical bus to charge the battery or sup-
ply power directly. We planned to make up a sub panel that could
be switched from the main power bus to the emergency battery to
supply power to the ARN-7, fuel transfer pump, and command trans-
ceiver.

Lt. Cook reported the plugs had now all been replaced and he
was going to take that special plug tool with us. The emergency
equipment people checked in with the bad news that the German
life raft would not hold pressure for more than a few hours. They
were trying to find a U.S. raft that could be satisfactorily adapted to
the JU 88 compartment.

Lt. Cook asked the crew to button up and configure the air-
craft so we could connect the batteries. We needed to power up to
complete a number of other checks. It was again after hours when we
secured and shut down for the night. After dinner, I returned to
base operations and finished plotting the maps and flight charts.
I completed my navigational logs for all legs of the flight.

The next morning, October 4, 1943 (Day four with the JU 88).I
checked in at the hangar and Lt. Cook said he would have power
on the JU 88 in about an hour. The right side P-38 tank was mounted
and stabilized with adjustable braces made by the depot machine
shop. We would need the capability to salvo the drop tanks in the
event of a power loss with a full fuel load, so we located the bomb
salvo switches on the instrument panel and scheduled a test of the
system for 0830.

I went to the office to check on the enroute messages. All sta-
tions had reported back and all confirmed that 91 octane fuel and
the other service products were available. Each station also con-
formed that their defense organizations had been notified. I returned
to the hangar where the paint shop had finished with the markings.
Cook advised that the JU was now powered up and we could do
some of the checks. We set up with Cook and the crew under the
right P-38 tank to catch it when it released. I went to the cockpit
and on signal, snapped the right red cover switch labeled Bomben-
befreiung (Bomb Release). There was a loud bang and smoke. I
shut off power and cleared the cockpit to discover the P-38 tank
still hung on the right bomb rack and Lt. Cook, Sgt. Atilio I.
Gromebeth, and a couple of other personnel with minor shrapnel
wounds. We discovered the left bomb rack lying on the floor be-
neath the wing. It had been blown off as explosive bolts and link-
age detonated when I toggled the emergency bomb salvo switch.
By a stroke of luck, the switches were wired backwards or we would